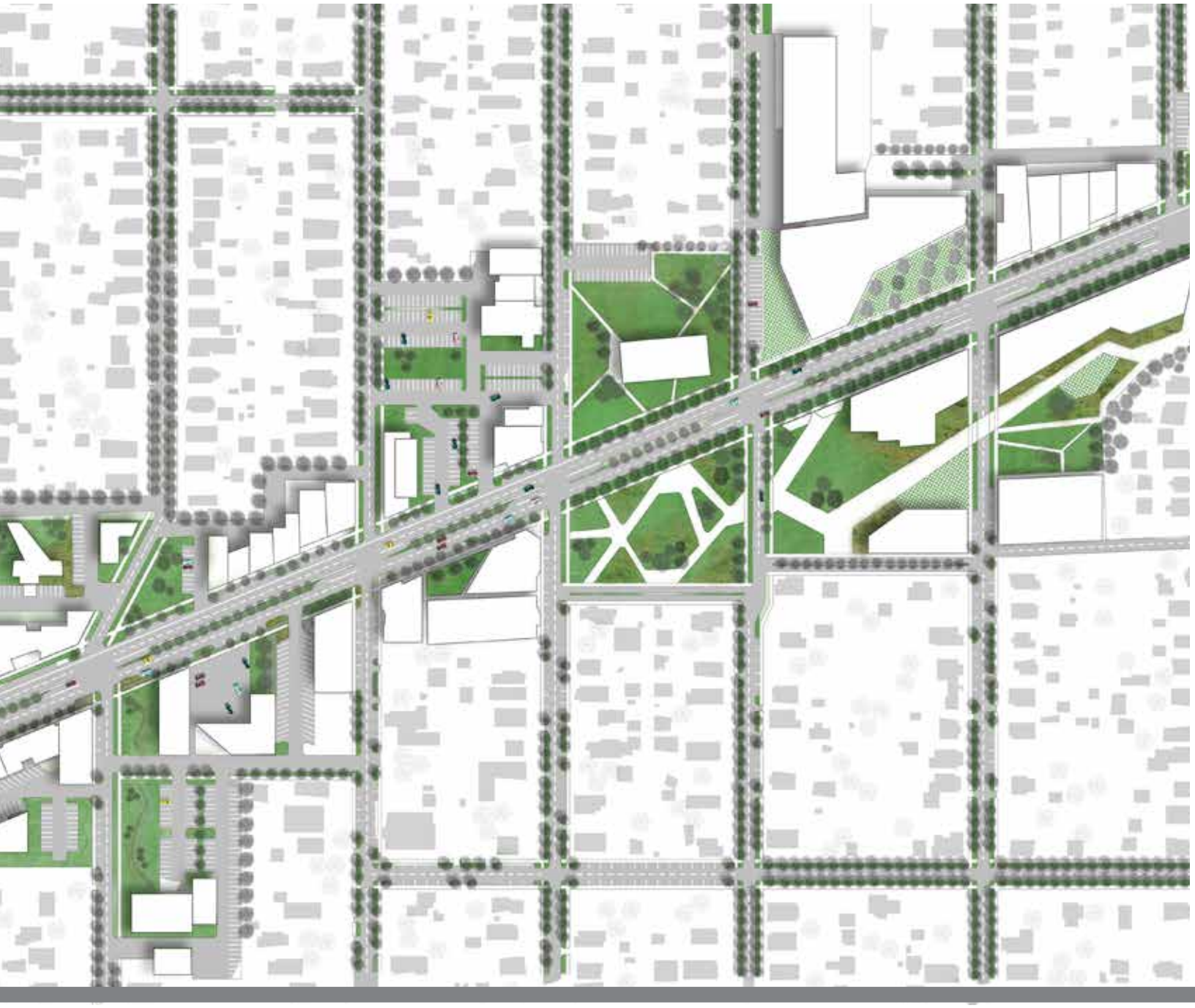
Indianapolis West Washington Street Neighborhood Renewal: The New Urban Green Corridor



Comprehensive Project

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LA 404: Landscape Architecture Comprehensive Project

Date: April 26, 2013

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ABSTRACT

The purpose of this study is to revitalize a culturally diverse neighborhood in a segment of West Washington Street, on the west side of Indianapolis, Indiana. This paper reflects upon a wide range of strategies focused on rehabilitating the neighborhood's social, cultural, and commercial life while promoting the principles of sustainable design and sustainable lifestyle. The project also analyses how renewing an urban neighborhood can shape connections between existing pedestrian transportation networks, achieve environmental performance, increase the community's wellbeing, and honor the neighborhood's unique culture and diversity.

Many elements of the neighborhood's built environment seem to be in decay. The quality of streets, open spaces, commercial life, and social interaction are slowly decreasing. However, the lack of accessible pedestrian transportation networks, open spaces, and civic outdoor spaces in the area provides an opportunity for design elements that can improve residents' quality of life.

The eleven-block framework plan includes areas along Washington Street between South Lynhurst Drive as the western border and South Tibbs Avenue as the eastern boundary. The project will create a detailed master plan for West Washington Street, plus selected detailed site designs that will contribute to a vision for rehabilitating the neighborhood. Strategies will include affordable housing, self-sustaining processes, renewable energy processes, productive open spaces, and design methods that foster social and cultural dynamics.

The analysis of case studies and a thorough review of literature provide insight on how to create a sustainable, cultural, and healthy development that accommodates different elements of the community. Research about sustainable design principles techniques, pedestrian network design strategies, and how inter-related use of underutilized spaces and facilitates will help guide the renewal of the West Washington neighborhood.

Supporting and reflecting a range of identities and cultures in the West Washington Street community can be achieved by implementing design principles in the built environment. Streetscapes, for example, can represent and encourage social and cultural dynamics. In addition, different underused facilities can be used to educate, provide healthy food, and reduce paved surface areas. Developing pedestrian-oriented networks within the neighborhood will provide opportunities to connect to bigger transportation networks. Finally, the West Washington Street rehabilitation can become a showcase for nearby neighborhood developments and will influence future generations in positive ways.

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INTRODUCTION

"I think the landscape is everything outside the building footprint. It is the moment you walk out of the house and enter the world…The asphalt is our landscape. The streets are our land-scape. The land-scape is everything out there, and it looks like hell. The United States is getting uglier and uglier. We are sprawling out, and so little value is given to our landscape" (Schwartz 128).

Throughout recent years, the West Washington neighborhood, located on the west side of Indianapolis, has been struggling to become a better community: Its open spaces, streets, buildings, and residents reflect the struggle. West Washington Street is no longer the ethnic and colorful destination for people.

In the past six years, two "Quality of Life Plans" have been developed for the area, yet it is unknown whether such proposals are being implemented. The following study outlines a project that helps revitalize part of West Washington Street. The area needs accommodations for a sustainable environment, healthier lifestyles, and better amenities that serve residents while hosting design elements that reflect and honor the neighborhood's unique culture and diversity.

In general, it is important to create a cohesive identity throughout the neighborhood because this helps create unity and sense of belonging among the residents. It is important to provide the neighborhood with sustainable principles that can increase social dynamics and represent an economic and environmental benefit. Streetscapes and a pedestrian-oriented network within the neighborhood are also important because they provide connectivity, serve as access paths for recreational purposes, and become cultural linkage with nearby neighborhoods. In addition, different underused facilities should educate, provide healthy food, and reduce the environmental impact of paved surface areas in the city.

THE PROBLEM AND ITS SETTING

PROBLEM STATEMENT

The purpose of this study is to design an urban green corridor employing sustainable landscape architectural principles and techniques for an underserved neighborhood in Indianapolis. This project results in a detailed master plan for West Washington Street, plus selected detailed site designs that contribute to a vision for rehabilitating the neighborhood's social, cultural, and commercial life while promoting the principles of sustainable design and sustainable lifestyle.

This design project employed landscape architectural design techniques to shape connections between existing pedestrian transportation networks and streetscapes to nearby parks. These green corridor design solutions illustrate opportunities for increased social and cultural dynamics, while encouraging physical activities and wellness lifestyles.

This proposed master plan and selected detailed site design demonstrations are achieved primarily by evaluating the community's existing open space network and discovering how to develop a design that transforms those spaces into productive landscapes that support community wellness needs. These proposed open space and landscape corridor designs encourage social interaction, while providing healthy pedestrian-focused development – including local commercial and community support features.

SUB-PROBLEMS

1. How can well-designed green corridors achieve their environmental performance, open-space benefits, and wellness lifestyle support, while also hosting design elements that reflect and honor the neighborhood's unique culture and diversity?

2. How can sustainable design principles increase the community's wellbeing?

3. How can a network of pedestrian and bike paths safely and effectively connect to existing networks near the West Washington Neighborhood?

4.How can streetscapes contribute to the community's social and cultural dynamics while encouraging physical activities and wellness lifestyle?

5.How can existing structures and underutilized facilities be adapted to create more civic engagement among the different cultures living in the neighborhood?

HYPOTHESIS

The project was designed and implemented to demostrate that:

- The green corridor design can achieve its environmental performance by implementing different sustainable techniques that enhance residents' lifestyles by providing a healthier environment for them and for visitors.
- The design elements, activities, and mixture of businesses reflect the culturally diverse community.
- Sustainable lifestyles, renewable energy, and environmentally responsible construction materials promote sustainability while encouraging people to reduce their environmental footprint.
- A well-designed pedestrian network addressing safety, connectivity, quality, and context will safely and effectively encourage more walkable communities.
- Activities along the streetscape and physical attributes of the spaces develop a sense of safety among pedestrians and encourage more usage.
- Community gardens, plazas, and well-designed spaces encourage social, environmental, and physical opportunities for residents and encourage different cultures to come together and interact.

ASSUMPTIONS

Decisions taken during the design process made the following assumptions in order to accomplish the project's goals and objectives:

- Zoning variances were obtained to accommodate design development.
- Public-private partnerships in the community were formed to increase and encourage development incentives for future projects.
- Vacant lots and buildings (underused spaces) were available for new development and reuse.
- Economic incentives were provided for local entrepreneurs.
- The city provided a mass transit plan for future transportation linkage to the airport.
- Schools and local parks provided support for community gardens, public spaces, and other civic engagement facilities.
- The city provided a neighborhood plan from local community organizations to reduce the risk of gentrification.
- A local organization (Indianapolis Bicycle Advocacy) provided a map that shows the location of existing bike lanes and also evaluates the best streets for bicycling in the city.

DELIMITATIONS

The project recognizes that certain limitations, should be taken into account:

- This project did not consider improvements to surrounding neighborhoods.
- This project did not address funding.
- This project did not redesign the entire West Washington Street.
- This project did not consider all sustainable techniques.

DEFINITIONS

Community: A group of individuals unified by a common location and social characteristics who often share cultural and historical heritage.

Cultural dynamics: The system of activities, spaces, and characteristics that encourage passive and active interaction between people.

Cultural diversity: A variety of social, economic, and ethnic backgrounds that creates a blended community.

Environmental performance: The method of measuring and recording the functionality of green infrastructures and sustainable principles.

Streetscape: The characteristic of a particular street, alleyway, or pathway that is intended to provide access to public parks and other public amenities.

Sustainable lifestyle: The principle that attempts to influence and reduce an individual's or society's consumption by minimizing the use of natural resources.

Sustainable design principles: The methods used to create environmentally sensitive development that empowers healthier communities.

Neighborhood revitalization: The process of redesigning specific areas, facilities, and the neighborhood's built environment to improve the local economy, aesthetics, and quality of life. Revitalization brings life and vitality back into the local community.

Pedestrian networks: Systems of sidewalks, trails, and bicycle paths that enable people traveling on foot or bicycle to safely and effectively reach destination points or make connections to other transportation services.

Underutilized facilities: Public or privately owned uninhabited spaces such as buildings, parking lots, and undeveloped spaces that are often under unacceptable conditions.

Urban green corridor: The system of facilities, street conditions, services, and activities adjacent to a street that improve the local quality of life.

Wellness lifestyles: The theory of individual basic emotional, social, and physical well being important to reach full potential in society.

PROJECT SIGNIFICANCE

The West Washington Street neighborhood exemplifies the impact of immigrants, culture, and historical and social richness. It serves as a historical record of the people and cultures that have inhabited its space. Once, Caucasian people with wealth and means lived there, then African Americans, and finally followed by mostly Mexican and Asian immigrants. Juxtaposed against this richness, we can also see signs of gentrification, struggling, and the developing urban center.

West Washington Street seems to be in decay. It lacks safe pedestrian transportation networks, bike lanes, access to sidewalks, and civic interaction among residents. The lack of accessible pedestrian transportation networks in the area also contributes to pedestrians' insecurity when they use streets for recreational and transportation purposes.

Plus, many pollutants coming from business parking lots contribute to the neighborhood's poor water quality. Commercially, the area is not very diverse. Along West Washington Street, the dominant businesses are used-car dealerships. Aside from not diversifying the commercial life of the corridor, the dozens of cars sitting in surface parking damages the neighborhood's environmental performance.

In today's society, "unless we design our future carefully there will be no future" (Wells), and as part of this community, I would like to improve the fate of my neighborhood by creating a safer, more inviting atmosphere. Responding to many failures of city developers, this project designs with a greater level of responsibility. To create green corridors that can optimize environmental performance, open-space benefits, and wellness lifestyle support, while also hosting design elements that reflect and honor the neighborhood's unique culture and diversity.

The project is significant because it considers the social, cultural, economic, and environmental problems that West Washington Street currently faces. The project is also significant because the different sustainable landscape architectural principles and techniques mentioned in the review of literature offer approaches that can improve the neighborhood, its individuals, and the overall environmental performance, and health. The results constructs the proper knowledge of how an urban neighborhood should perform environmentally, economically, and socially.

This study is significant for the West Washington community but also for other neighborhoods around the city. For instance, some strategies mentioned throughout the analysis could be applied to these neighborhoods as well, and people could learn about the process and how it can be applied to those settings. Finally, the West Washington Street rehabilitation becomes a showcase for nearby neighborhood developments and influences future generations.

CLIENT AND USERS

- The city of Indianapolis(Department of Metropolitan Development)
- The community
- Current residents
- Future residents
- Visitors (nearby neighborhoods)
- Business owners (retail, offices, restaurants, car dealerships, etc.)
- Community Developers
- Wayne Township Government Center

REVIEW OF LITERATURE

The expanding urban population of Indianapolis has greatly affected the wellbeing and built environments of neighborhoods around the city. The role of urban streets has also influenced development patterns as the design and layout of streets have changed over time.

The history of streets can be traced back over 8,000 years. Throughout antiquity and the Middle Ages, the primary functions of streets were to serve as transportation arteries. During the Renaissance, streets became more architecturally significant. Later during the Baroque era and the 20th century, street grids changed drastically to accommodate the introduction of automobiles (Jefferson 3).

After WWII, city streets became more car-oriented, disregarding the architecture and functionality of streetscapes. Furthermore, many urban developments are becoming more horizontal (sprawl), and the car is still the major focus (Jefferson 3). However, real estate developers have also influenced the development of U.S. cities, and in many urban communities around the world, built environment patterns are conflicting with vital open space opportunities. Land is often exploited for short-term economic profits without careful planning or design, jeopardizing productive open spaces, supportive natural systems functions, and critical social wellbeing. Streets should become more than traditional means of access; they should also be utilized as means of social expression (Talen 3).

Because of this growth and sprawl, future development projects must redesign and rehabilitate the streets of our communities using thoughtful design. This review of literature analyzes five research questions: how sustainable design principles can be applied to reflect neighborhood's unique culture, how sustainable design techniques can increase the community's wellbeing, what innovative pedestrian and bike design strategies can connect to existing pedestrian networks, how streetscapes contribute to social and cultural dynamics, and how existing open spaces can be adapted to create civically engaged areas.

NEIGHBORHOOD REHABILITATION

Streets, plazas, parks, and open spaces are an important segment of a community, providing social activities while supporting wellness lifestyles.
Well- designed urban green corridors can provide a range of benefits, including environmental, educational, physical, and emotional.

One often-researched question is how to maintain a balance between the benefits and design elements that reflect and honor a place's unique diversity. Although it is a complex question, valuable research information leads us to a suitable design approach. The National Trust for Historical Preservation states:

> Design means getting the street into top physical shape and creating a safe, inviting environment for shoppers, workers, and visitors. It takes advantage of the visual opportunities inherent in a commercial district by directing attention to all of its physical elements: public and private buildings, storefronts, signs, public spaces, parking areas, street furniture, public art, landscaping, merchandising, window displays, and promotional materials. Retaining and expanding successful businesses to provide a balanced commercial mix, sharpening the competitiveness and merchandising skills of business owners, and attracting new businesses that the market can support.

IDENTITY

For a place to reflect and honor the neighborhood's unique culture and diversity, the area must have a persistent identity that differentiates it from others (Carmona 103). Special qualities throughout the West Washington corridor such as community gardens, holiday events, or civic plazas can help create unity and sense of belonging. Spaces and places are always in constant change, but although they are in states of becoming something, they have identifiable characteristics that never change (Dovey 3). This sense of place, character, and identity is consistently stable, telling us that each place has unique identity. Carmona and Tiesdell recognize:

> Identity is in the experience, eye, mind, and intention of the beholder as much as in the physical appearance of the city or landscape. But while every individual may assign self-consciously or unself-consciously an identity to a particular place, these identities are nevertheless combined inter-subjectively to form a common identity. Perhaps this occurs because we experience more or less the same objects and activities and because we have been taught to look for certain qualities of place emphasized by our cultural groups. (104)

> Static physical settings, activities, and meaning are three components that create the basic elements of place identity. The static physical setting can be the physical built environments. Structures then develop character to support the activities of people within the physical context. The meaning of the place may be rooted to the physical context, but humans give intentions and experiences to those spaces (Carmona 104). Together physical appearance, activities, and meaning are fundamental components of our experience of a place. Links between them are the elementary structural relations of that identity.

ACTIVITIES

As previously mentioned, the meaning of the activity gives a unique identity to the physical setting. Outdoor and landscape-supported activities are divided into three categories—necessary, optional, and social—and are of great influence to reflect and honor a neighborhood's unique culture. Thus, they should be part of an ordinary street (Carmona 143).

Necessary activities include those that are more or less compulsory. For example, going to school, waiting for a bus, shopping, or all those activities that take place in everyday tasks. The exterior environment influences these activities.

Optional activities are pursuits done only if individuals wish to do so. They include those activities that take place when exterior conditions are optimal and when weather and place allow it, for example, watching a concert or a soccer match in a community park. Such optional activities become essential elements when trying to showcase the neighborhood's uniqueness to visitors or retain current residents. Therefore, optional activities become essential elements in neighborhood rehabilitations. Effective design provides a range of activities that influence people to stop, sit, eat, play, and become regular users (143). In cities with poor quality spaces and streets, few people will participate in activities; most will be more likely to hurry home. Restaurants and coffee shops allow people to sit and enjoy a cup of coffee, and parks and open spaces attract people who want to exercise in the morning or take a walk after dinner. The best environments offer a broad spectrum of activities (Carmona 143).

Social activities depend on the presence of others in public spaces. This is an important factor in any development. For a place to be functional, social activities must be included at all times. Activities such as playing, exchanging greetings, sharing conversations, or just simply hearing or seeing each other. Occur spontaneously and as a direct consequence of people moving about and being in the same place. The character of social activities varies depending on the context in which they occur. Social activities translate to passive contact, with little going on, but at the same time they can be appealing (Carmona 144).

For the West Washington corridor, social activities such as festivals, parades, or church events in community parks can develop a closer bonding between residents. As Carmona explains, "Life between buildings is not merely pedestrian traffic or recreational or social activities. Life between the buildings comprises the entire spectrum of activities, which combine to make communal spaces in cities and residential areas meaningful and attractive" (145).

PROMOTING THE PRINCIPLES OF SUSTAINABLE DESIGN AND SUSTAINABLE LIFESTYLE

Many aspects of neighborhood redevelopment can be adapted to practice sustainable design principles and encourage residents to live sustainable lifestyles. Environmental, economic, and social aspects are important elements in planning sustainable communities (Friedman 7). Construction, upkeep development, roads, open spaces, and residential developments represent an ecological, economic, and social burden to our community's sustainability. These burdens on our natural systems are of major concern in today's society, yet few cities follow the principles of sustainable systems.

The first step towards more sustainable practices is the idea of self-sustaining process. This means that developments should be planned to minimize their initial impact and later become part of recycling projects where the sites or buildings can be the main generator of additional sources to power their own existence and perhaps even contribute to additional resources for the community (Friedman 10). The local government can encourage homeowners along the West Washington corridor to include self-sustainable technologies by giving them monetary incentives for such changes. Many houses in the corridor already need renewal, and implementing self-sustaining water and solar sources should be encouraged. Similarly, buildings can collect and purify rainwater for communal needs (Friedman 11).

Another important factor for promoting sustainable design principles and lifestyles in a community is creating support systems and influencing others to support similar projects. For example, supporting systems can occur by seeking community designs that can minimize the environmental impact. Marketing West Washington Street as a "green corridor" can potentially attract more people into the neighborhood and at the same time reduce the project's environmental impact. By utilizing lower-cost products, local resources, and recycled materials, the project can address the environmental impact while also benefiting the community financially. For instance, building smaller homes with denser configurations may contribute to the economic impact and can promote affordable housing (Friedman 11).

The West Washington corridor can move toward a more sustainable community, providing affordable housing for young first-time buyers and retaining residents in a much desired socially, culturally, and

demographically diverse community.

In the decades to come, urban communities will become more attractive. Many urban cities today are hosting sustainable design principles that attract and retain people. Cities such Portland, Seattle, San Francisco, and others have implemented sustainable technologies in their neighborhoods, buildings, and streets, but are also encouraging development projects to sustain communities throughout their entire lifecycle.

Practices of sustainable principles are linked with conservation of natural resources. Renewable resources and renewable energy are also considered practices of sustainable development. Our current development practices consume large amounts of resources that cannot be quickly renewed. Society will not be able to continue this practice without serious consequences (Freedman 12-13). Solar, wind, geothermal, and hydroelectric power are different potential sources currently implemented in residential areas. To generate renewable energy for the West Washington Street corridor, the design must pay close attention to the context of the area.

The neighborhood first must be analyzed to determine suitable areas where renewable sources and energy can be implemented. For example, in the area few parcels are classified brownfields that can potentially serve as geothermal fields. Since the neighborhood is west of downtown, it should be able to harvest prevailing winds coming from the west and southwest without being blocked by high buildings. Potentially, the corridor can become the showcase for the first renewable energy community in Indianapolis.

In "Sustainable Residential Development," Friedman states that fostering economic sustainability is another approach to community planning. Present developments can avoid the transfer of cost as result of poor decisions and decrease the impact to future generations (8). In North America, the housing sector is predominantly private, so many city planners may attempt to promote individual prosperity by not imposing strict regulations. However, this can influence developers' decisions about whether they can raise a dwelling price beyond current residents' affordability. Over the past decades, we have seen this economic impact in the design of city streets. Wide roads with poor engineering, constant resurfacing, and rainwater runoff going directly into our rivers will all have long-term economic implications (Friedman 9).

In recent years, the West Washington Street corridor has seen two dwelling units develop. First, the H. Lauter Lofts located just east of the corridor, which are advertised as "Luxury Condominiums." The facility used to be an old furniture factory that employed many residents from the area, but like many other factories during the Great Depression, it closed. The building still stands and has been renovated into condos and lofts, but the prices and rent are expensive. The community of West Washington is composed of people with incomes who cannot pay such high rent.

The other dwelling development is currently under its final construction stage. The new apartment units are located where the former Golc Soccer Fields used to be. During weekends, the field would be full of energy, and many soccer matches and championships took place there. For the community, it was terrible to take away such an important social space. The construction of the new apartments has managed to increase the rainwater runoff to the main corridor, and during the summer of 2012, many accidents took place due to the amount of water in the street. Unfortunately,

it is not yet clear whether these housing units will be accessible and affordable to the community.

Other aspects to further investigate for sustainable design principles are high-density neighborhood design, green homes, and dwelling renewal. As mentioned before, further investigation must be made to determine sustainable design principles for this project.

CONNECTIONS BETWEEN EXISTING PEDESTRIAN TRANSPORTATION NETWORKS

Creating successful pedestrian and bike paths within the neighborhood will increase environmental, social, and health benefits for the community. Although today's cities and streets are still primarily designed to support vehicular traffic, it is time to make our communities more walkable and pedestrian-friendly. Policy changes at the local and federal level now better support pedestrian and bicycle network projects. In some places, walking and bicycling are still not viewed as modes of transportation, but several major cities around the U.S. have made efforts to redevelop streets and integrate pedestrians and cyclists. Recently, a local organization along with Ball State University Urban Design graduate students developed a map that helps cyclists navigate around city. The map analyzes different elements of the streets and ranks streets according to the level of bikeability. West Washington was ranked as a one of the least bikeable streets in the city.

A pedestrian-friendly or walkable street has a built environment that supports and encourages walking, providing a safe, comfortable connection with different destinations within reasonable amount of time (Southworth 247). Pedestrian networks (foot and bike) should offer visual attractions and provide access to necessary activities such as school, work, or grocery shopping. West Washington Street is a very dangerous street for pedestrians. The lack of sidewalks and bike lanes makes it harder to safely reach bus stops and parks. In the past month, I have witnessed three car accidents where pedestrians were involved.

When people have the perception of not feeling safe in cities, it is often due to the insecurity they feel on sidewalks (Southworth 246). Pedestrian and bicycle transportation development involves many components. For research purposes, discussions about safety, connectivity, quality, and path context will be the topic of this literature review section.

SAFETY

The main attribute for a successful neighborhood street is that individuals must feel personally safe and secure on the street among strangers (Carmona 147). To solve insecurity issues, close attention must be paid to public surveillance.

People watching people are what most thieves are afraid of, so crimes can be decreased through incorporating storefronts and other public places along street edges (Carmona 149). The hours of operation in public spaces are also an important factor for solving safety issues. Good streets have balance between facilities used during the evening and those used at night. A good mixture of public facilities along the path gives people reasons for crisscrossing the street. Storekeepers and small businessmen keep street peace and order, like surveillance cameras in the neighborhood (Carmona 150).

Streetlights also contribute to neighborhood safety. Good lighting strengthens every pair of eyes in the street, and conversely, insufficient streetlights create dark areas where surveillance does not reach. Streetlights also facilitate possible social

uses of public spaces in the evening. For example, a lit park could let people run or play soccer after school or work. In today's urban environments, many people work through the entire day and return home after dark and don't have much time to spare, so having a park open at night is vital to health and wellness.

CONNECTIVITY

Sidewalks and bike lane connectivity is determined by their presence and continuity, plus absence of barriers. The more paths a network has, the more connectivity a neighborhood has and the more conformable it becomes for residents. In addition to improving walking and bike connectivity, barriers to pedestrian access must be minimized. For example, cul-de-sacs, dead-end streets, busy arterial roads, railroads, and power line right-of-way can become hazards for pedestrians (Southworth 250). Natural landforms can also become barriers for network connectivity because designers must minimize land disturbance, finding design solutions according to the land's natural features.

LINKAGE WITH OTHER MODES

The same way it is important to have internally well-connected pedestrian networks within a neighborhood, it is also important to provide safe access to large city and regional networks. Linkage to other modes of public transportation such as bus, lights rail, and subway within reasonable time distance increases the value of the pedestrian network. As the community becomes less dependent on cars, walking and public transit contribute to minimizing the city's overall carbon footprint.

QUALITY

The quality of the path is essential for usage. The typical U.S. commercial street is the least hospitable pedestrian path because these roads are dangerous, wide, polluted, noisy, and treeless. Bombarded with billboards, urban streets do not express any character and only represent the chaotic world in which we live (Southworth 251). The desirable pedestrian network should be a continuous, smooth surface, with no potholes or other irregularities that could contribute to serious liabilities (Southworth 251). Climate conditions should also contribute to the network design. Special considerations should be made for developments in cities with snow seasons. Steep hills may have different design characteristics, making constant continuity of paths impossible. Steep hills fortunately are not much concern along West Washington since the topography is rather flat.

Pedestrian-scale lighting can enhance the nighttime usage and create a safer environment. Landscape such as bushes and trees can help define the streetscape and also provide microclimates (Southworth 251). Creating spaces with plenty of shade during the summer is important and helps keeps pedestrians cool. Tree leaves absorb and filter the sun's radiant energy and also help moderate rain and wind.

PEDESTRIAN PATH CONTEXT

Designers should always pay close attention to site context because it contributes to design concepts and provides alternative solutions. Pedestrian pathways should not be an exception, and special attention must be given to the path's land use patterns, safety, and quality (Southworth 251). Pedestrians must be engaged with the site, and this can be encouraged by providing visual interest, holistic street design, active facades,

social landscape elements, and views created by focal points (monuments, hardscapes, parks).

Redesigning (retrofitting) existing streets for pedestrians and cyclists will not come easy because urban street patterns are already established and have been built according to "automobile-dominated standards" (Southworth 254). Slowly but surely, interest and need for pedestrian transportation networks has become more evident. With enough governmental and public support, urban streets of the future will become pedestrian and bicycle-oriented.
Future generations will be more conscious about our built environment and will reject the current urban way of life.

STREETSCAPES TO NEARBY PARKS IMPROVE SOCIAL AND CULTURAL DYNAMICS, ENCOURAGE PHYSICAL ACTIVITIES, AND PROMOTE WELLNESS LIFESTYLES

To appreciate a place, people must consider three primary entities: paths, portals, and spaces. Together, these public spaces make up the most meaningful exterior areas in the urban environment. To limit the research, this project will only consider paths (streetscapes). According to Carmona, paths are the boulevards, avenues, streets, and alleys that connect places and knit the city together.

Many aspects of the existing West Washington neighborhood's streets can be redesigned to improve the social and cultural dynamics. Also, design features can improve streets and make them more accessible for physical activities. The West Washington community streets lack social interactions, and many streets linked to the corridor do not even have sidewalks and are inhospitable for pedestrians. The streetscape can create a more intimate connection between residents and develop cultural and social dynamics. For example, streetscape can offer places or areas where people can sit and enjoy flowers or a water fountain. The corridor's cultural diversity can be portrayed through a well-design and planned streetscape.

In urban settings, paths are devoted to circulation—moving from place to place. Over time, they become familiar streetscapes that evoke emotion and create wonderful experiences. Often streetscapes or paths are where people engage in activities, including vehicle travel. These streetscapes are important to the public realm because they involve experience of approach, anticipation, invitation, and arrival (Carmona 185).

Successful streetscapes define a community's character and uniqueness, identity, economics, and culture. They also often represent linkage points to other neighborhoods. Many activities take place along the way. The inviting power of plazas, gardens, or squares flows out of the streetscapes and carries visitors into these spaces (Carmona 185). People who use the street by foot or car define streetscapes. In urban settings, pedestrian pathways still correspond to vehicular ones. Defining whether a specific path will be devoted to foot versus vehicle depends on the street proportions. Some streetscapes are purely devoted to pedestrian traffic and are only accessible by foot; others allow little vehicular access or both pedestrian and auto. Volume, speed, and type of vehicular traffic will also affect pathways (Carmona 185).

Physical attributes, usage, and ambiance also help shape the character of streetscapes, recognizable by their historical significance to the community (Carmona 186). The physical attributes appear

in building facades, ground planes, and cross sections through the path. Building facades determine the architectural characteristic of the streetscape and become physical boundaries (Carmona 186). Façades' color, texture, height, and ornamental attributes give character and identity. Streetscapes can have a significant effect on how people perceive and interact with their community and with each other.

One major obstacle the W. Washington neighborhood faces is integration with and acceptance by the rest of the Indianapolis community. The new streetscape should not assimilate with (ie. try to look like) other parts of Indy, but it should present a proud, aesthetically pleasing identity— that makes residents feel part of a community but also draws visitors to enjoy the neighborhood and support businesses.

Identity can be an attraction. For example, in cities such as Chicago or San Francisco visitors seek out ethnic neighborhoods like Little Italy or China Town. This brings money to those businesses in the neighborhood, further supporting their community. In Indianapolis, Broad Ripple and Massachusetts Avenue target different cultural groups. With a similar approach, West Washington Street can become more attractive.

Activities along the streetscape must accommodate the users' needs, especially movement, mainly accommodating the circulation between point of origin and destination (Carmona 186). They also accommodate activities happening in plazas, gardens, and parks. On some occasions, streetscapes become linear plazas and horizontal parks, to host civic events. In many Latin American cities, streetscapes transform into farmers' markets, parades, and occasionally protest sites. According to Carmona, paths become more than circulation corridors; they become places of "being and belonging" (Carmona 188).

Ambiance (feel) has a strong correlation with the volume, speed, and type of traffic produced in the space because these conditions contribute to perceptions of the street (Carmona 187). Ambiance is the sum of all the experiences, memories, emotions, and expectations. Ambiance can engage with our senses and influence our perception and preferences (Carmona 187). The experience of an urban streetscape will be shaped by many environmental contributors such as noise, movement, vitality, and other stimulators that produce "our sense of place, energy, and mood" (Carmona 187).

The feel of the streetscape can also be influenced by the place's historical significance. It can affect our emotions and contribute to the place's identity (Carmona 187). The streetscape can be a memorial to a historical event, such as the first settlement of South American immigrants. When the community is aware of its history, the streetscape creates a spirit of place in the ambience and enriches emotional content (Carmona 188).

Successful paths or streetscapes are a pleasure to be in and move through. They draw users into the life of nearby neighborhoods and circulate people from one exciting place to another. Successful streetscapes are "must see" places, and they have a significant meaning in the community as living narrative and portraits of the community's culture.

EVALUATE EXISTING COMMUNITY OPEN SPACES AND ADAPT EXISTING CONDITIONS

According to the National Center for Health, in 2009-2010, over 78 million U.S. adults and about 12.5 million U.S. children and adolescents were obese. Obesity is among the most common health

conditions in our society. It is the easiest medical condition to recognize but the most difficult to treat (Ogden 2012). Unhealthy diets and lack of exercise lead to many obesity-related diseases and problems such as diabetes, high blood pressure, and coronary artery disease.

Unfortunately, past planning practices in our cities do not make obesity treatment easy. Open spaces, parks, plazas, squares, and sidewalks are some of the easiest and cheapest solutions for obesity treatment. Besides encouraging healthy living and providing aesthetic values to the cities, parks and open spaces promote weight loss, limit suburban sprawl, protect the environment, and even fight issues related to global warming (Harnik 15). Green spaces and trees improve air quality through photosynthesis, converting CO2 to breathable oxygen.

Locating parks in our cities does not come naturally (Harnik 15), and many 21st- century cities have little room left for parks and other public spaces. Yet we know parks are an essential element to the wellness needs of our communities. In many instances, city parks consist of leftover spaces between buildings or misshape parcels with poor drainage, soils, and other undesirable qualities that make the site unsuitable for other uses (Akkerman 30).

Marion County and Indianapolis have a decent number of neighborhood parks, which are supposed to be located in areas where they serve individual communities and neighborhoods. However, throughout the West Washington Street neighborhood, parks mainly consist of playgrounds and picnic shelters. Some have basketball courts or baseball diamonds, but most are in bad condition and are not accessible to pedestrians.

All those undesirable lost spaces in urban environments can be redesigned to create great outdoor areas for social, environmental, and physical opportunities. For example, spaces between buildings, parking lots, and spaces overgrow weeds with can be retrofitted. Underutilized facilities can be adapted to several forms of development. While typical redevelopment methods such as wetlands, stormwater storage ponds, rail trails, and rooftop designs can be effective, they often require more space or design criteria to obtain project approval from the city governance. The alternative to these strategies is to repurpose and redesign existing facilities. For example, five strategies are often used in neighborhood redevelopment to enhance underutilized facilities or create partnerships with current landowners: sharing schoolyards, developing community gardens, considering cemeteries as public green spaces, removing/ reusing parking lots, and changing building functions.

SHARING SCHOOLYARDS

The first option for providing more open spaces or parks in communities is to share schoolyards for public purposes. Schoolyards often are central within school property and are vital spaces to promote social and cultural interactions. Schoolyards are typically large flat pieces of land serving recreational purposes for children, but they have the potential to become more than fenced and locked squares. Great schoolyards have healthy grass, big trees, playgrounds, comfortable benches, and sports equipment (Harnik 110). They seem to have more character than private schoolyards and in some cases are open to the public. In essence, they become a neighborhood's park where children and adults interact with each other.

Even though schoolyards represent a huge

opportunity for community engagement, this approach always draws some reluctance. Maintenance is continuously an issue because neither the school nor the city authorities are willing to invest extra money or effort into maintaining a park utilized by the public. Having more people visiting the schoolyard means more issues with property damage and then the park could attract vandalism.

Another concern about utilizing schoolyards for public use is hours of operation, liabilities, and vulnerability. These three concerns are interrelated. When a schoolyard becomes a public space, it also becomes dangerous, so safety and liability become an issue (Harnik 111). If a local resident gets hurt at the school park, the multiple entities that share management and ownership take responsibility for the event. Disagreements usually arise between entities, and nobody wants to be liable for what happened.

Community members will often use the space when the sun is still up, but as soon as the sun sets, the space may attract strangers and vandals. Kids see the school playgrounds as safe and trust adults there (teachers, parents, friends). However, if these parks become public, people with evil motives could target them. Also, an obstacle arises when it comes to the security of school children. Parks open to the community at night find evidence of drug and sex paraphilia (Harnik 112). This suggests that an enclosed/fenced park that can be locked at night might be more appropriate in situations where schoolyards become open to the public.

Nevertheless, to counter the security, liability, safety, and vulnerability issues, an urban design strategy called “eyes on the street” suggests that when spaces are more active and heavily trafficked, wrongdoers are less likely to target those areas – for fear of being seen/caught (Carmona 149). Parks could generate light with their own solar collectors so they absorb light/energy through the day and illuminate the park at night. This would minimize cost and energy use, while also demonstrating sustainable solar energy to school kids and the community.

COMMUNITY GARDENS

Another possible adaptation for leftover urban spaces is the integration of community gardens. Most neighborhood cities have plenty of open or underused space that can be developed into community gardens. Urban communities around the country often underappreciate the resources that community gardens provide (Harnik 83). The community compositions of urban cities are mainly immigrants who have lived in cities but whose culture has deep roots in agriculture. According to Harnik, in 1980, between 7 and 18 million people wanted to garden in their city but were not able due to lack of space (83-84). In ethnically diverse communities, these gardens are a great way for people to grow their own traditional vegetables, herbs, and foods often not available at mainstream supermarkets.

When Americans travel overseas, they are surprised to see even small patches of green areas or spaces between buildings used to cultivate flowers, vegetables, and herbs, Here in the U.S., those leftover spaces are abandoned, underused, and receive little attention. In more recent years, urban agriculture has become more common. Community gardens can be built in different forms and provide many resources: beautiful spaces, food resources, educational opportunities, community strength, reduced pesticide exposure, grown social capital, better health, and improved community wellbeing (Harnik 83).

There are two types of community gardens: those within existing parks and stand-alone gardens located on vacant land (Harnik 83). However, providing a community garden in an existing park could mean not creating a soccer field or a dog park. Thus, gardens in existing parks may not work under these circumstances. On the other hand, developing a garden in an underused lot may have more benefits (45). For example, one of the biggest impacts community gardens have in society is improving accessibility to fresh food and better nutritional diets.

Two major cities that are doing great things with urban agriculture on vacant lots are Detroit and Milwaukee. According to Michael Broadway, the Milwaukee Urban Gardens a local non-profit organization "seeks to acquire land" predominately in impoverished urban areas with the hopes to work with the community so they can preserve, develop, and maintain community gardens throughout the city. In 2009, the organization was able to obtain city-owned vacant lots just north of Milwaukee's downtown area and cluster four community gardens (Broadway 26). In "Growing Urban Agriculture in North American Cities: The Example of Milwaukee," Broadway states, "Converting the lots into a community garden provides a host of benefits, some of which are higher property values, lower crime rates, and improved community cohesiveness, as well as community access to fresh fruits and vegetables" (26).

Although community gardens provide many resources and benefits to the community, they also have drawbacks, including theft and city organization that opposes community gardens. Gardens exposed to the public are easy to damage or steal produce. Because of theft, gardens must be under constant supervision and require close control from the people involved (Harnik 84). But they can be successful if they are properly maintained. Gardens should be visible, near edges where they can be seen by pedestrians and vehicles, and be accessible for irrigation (Harnik 85).

In *Urban Green: Innovative Parks for Resurgent Cities*, Peter Harnik states: "Of the 18,000 or however many community gardens, most of them stand-alone gardens, the great majority operates in humble, contented obscurity, providing their micro-farmers with fruits for their eyes or the stomach, sociality for the heart, and pleasant breathing spaces for the neighborhood" (86).

During summer 2012, community members from the West Washington neighborhood collaborated with a local initiative and started one of the first community gardens near the corridor. The Hawthorne Community Garden/ Huerto Comunitatio encourages residents to plant their own vegetables and at the same time learn how their community garden improves urban biodiversity, while working together towards a more sustainable neighborhood. The neighborhood has reduced its energy consumption since they can grow/obtain their fresh vegetables a few blocks away from their houses and without driving to the store. This diverse neighborhood should implement more vibrant green spaces such as community gardens through the area. This can mean that vacant lots could host environmental, social, and economic benefits for the community. Residents can grow their favorite native foods and can share them with their neighbors. Vacant lots could be transformed into gardens of spices, fruits, and other vegetables that are not easily available at supermarkets (Sustainable Indiana 2016).

CEMETERIES

In the past, cemeteries were the "principal manicured green-space for cities" (Harnik 125); open spaces where people could relax and have lunch. While some people still see cemeteries as parkland, more are skeptical about it. For example, Oak Woods Cemetery in Chicago is located near a high-value, high-density neighborhood yet does not seem to deter people from living in the area (Harnik 125).

Many cemeteries around the country have changed rules and regulations as a way to utilize their space for recreational purposes. For instance, many famous cemeteries host walking trails, tours, picnic areas, benches, and other activities such as concerts (Harnik 125-128). Crown Hill Cemetery in Indianapolis is a great example of park space. They market themselves as a tourist site and hand out maps of famous graves to visit. Crown Hill Cemetery is open to the public during the day and hosts private and public walking tours (Crown Hill Funeral Home and Cemetery). Transitioning cemeteries to urban parks requires many efforts within and outside the cemetery. According to Peter Harnik, "To be successful as an urban park, cemetery seems to require a private, nonprofit partner agency or a conservancy to provide extra funding, volunteers, programming, and publicity" (130).

With good design and management, the cemetery can be a site of pride, history, and a beautiful space in the community. The West Washington neighborhood has two well-known cemeteries: Floral Park Cemetery and Mt Jackson Cemetery. Both are close to the main corridor (W. Washington St.) and accessible from various points around the neighborhood. Many people around the neighborhood do not know that one of the greatest baseballs player of ALLTIME is buried in Floral Park. Oscar Charleston was the greatest of the Negro League players and was inducted into the National Baseball Hall of fame in 1976 (Strecker 31).

If the above issues can be worked out and there is public support from the community, cemeteries can serve as "green refuge in park-scarce neighborhoods" (Harnik 130). They can also represent community pride and reflect the history of the corridor.

REMOVING/ RE-USING PARKING

Parking lots are becoming the worst nightmare for urban designers. In our society, we are used to driving everywhere regardless of distance. We drive from home to the park, to the corner store, or to the nearby restaurant (Harnik 148). The well-known Walt-Mart or Target parking lots are becoming a major subject of research due to their poor aesthetics and environmental impact. Impervious parking lot surfaces affect water quality and wildlife; blacktop generates heat island effect and sedimentation.

Our dependence on the car is counterproductive because it suggests we need more space to park. These patterns of consumption drive developers to build more and more parking spaces everywhere. According to Harnik, 100% auto access means 0% park space in urban cities. If parking lots are removed or re-used, it is possible to integrate community gardens, farmers markets, or recreational areas. Cities need less surface parking and more access to mass transit. By providing alternative transportation options for residents, they will be more likely to use parks and not drive their automobiles as much.

BUILDINGS' FUNCTION

The same way land becomes leftover space in urban cities, buildings often get abandoned or cease to serve any functionality. When redeveloping buildings, it is essential to consider human needs as the basis for concepts of functionalism (Carmona 215). Listing the functions that will occur in a proposed development would help guide and solve design problems. Buildings may be re-designed based on the human need for light, access to clean and open air, or for specific services (Carmona 215).

The re-design of buildings can also go beyond providing shelter or services. The buildings themselves can be constructed of recycled materials. Having a more sustainable architecture can also represent the neighborhood's commitment to sustainability, and it can showcase sustainable principles. By reducing the environmental footprint of its built environment, the community becomes more aware and proud. Changing buildings' environmental attributes such as materials can also express elements of the neighborhood culture and give character to the space (Carmona 224).

When re-purposing underutilized spaces or facilities, designers must create visible connections between new and old open spaces, buildings, and activities. It is important to create outdoor environments as social and physical spaces with attractive features such as inspiring horticulture, impressive hardscapes, and sculptures that draw people in. Pedestrians and visitors should feel comfortable and welcome. Utilizing underused spaces for exercise, socializing, food, and entertainment will provide enough diversity to make the spaces successful.

CONCLUSION

Having a range of identities and cultures in the West Washington Street community and reflecting those in the corridor will not be an easy task. Many features can be reflected in the built environment to create exciting experiences for the users. The corridor can be more sociable, beautiful, fun, and conscious about its contribution to environmental problems. Providing the community with social dynamics is tremendously important, but applying different sustainable principles in the area can also increase the social, economic, and environmental value of the neighborhood. Streetscapes can represent and encourage social and cultural dynamics while serving as access paths for recreational purposes and cultural linkage with nearby neighborhoods. In addition, different underused facilities can educate, provide healthy food, and reduce paved surface areas in the city. Developing a pedestrian-oriented network within the neighborhood provides more connectivity within neighborhood sub-spaces and opportunities to connect to bigger transportation networks. Finally, the West Washington Street rehabilitation can become a showcase for nearby neighborhood developments and will influence future generations.

PROJECT REQUIREMENTS

PROJECT MISSION STATEMENT

The mission of this project is to analyze how the renewal of a culturally diverse urban neighborhood can promote sustainable design principles; moreover, how the methods and characteristics mentioned in the goals and objectives can be implemented in the master and site-scale plans for specific areas of the West Washington Street in Indianapolis, Indiana. Affordable housing, self-sustaining processes, renewable energy, and supporting systems are important factors for promoting sustainable design principles and lifestyles in a community.

Because of the environmental and social importance of adapting underutilized urban spaces in the neighborhood, existing recreational parks, parking lots, and schoolyards are enhanced to achieve environmental performance while encouraging physical activities and healthy lifestyles for residents. The proposed plan integrates the neighborhood's unique identity to transform and create connectivity to and from the neighborhood.

Landscape architectural design techniques shaped connections between existing pedestrian transportation networks, streetscapes, and nearby parks. The project also creates productive open spaces for residents and visitors to encourage opportunities for social and cultural dynamics while encouraging physical activities and healthy lifestyles. For instance, considering the following goals and objectives helped achieve suitable solutions and guided the framework master and site plans.

GOALS AND OBJECTIVES

GOAL 1

Provide social and cultural benefits that encourage positive development in the community while employing sustainable landscape architectural principles.

Objective 1: Use characteristics of neighborhoods that reflect and honor their unique culture and diversity.

Objective 2: Highlight activities that reflect the neighborhood's identity.

Objective 3: Design a network of streets, plazas, parks, and open spaces.

GOAL 2

Design with sustainable practices for development.

Objective 1: Encourage self-sustainable practices.

Objective 2: Establish renewable energy systems in the neighborhood.

Objective 3: Use affordable housing and mixed-use development

GOAL 3

Provide safe and suitable alternative transportation routes for residents.

Objective 1: Locate routes within walking distance from residential neighborhoods.

Objective 2: Locate routes near existing sidewalks.

Objective 3: Locate routes that intersect with green spaces.

Objective 4: Provide a safe and inviting atmosphere for users.

GOAL 4

Create a socially and culturally dynamic community.

Objective 1: Locate streetscapes as linkage points to other neighborhoods.

Objective 2: Offer activities along the streetscape that accommodate users' needs.

Objective 3: Use and manipulate elements of the places to create experiences, memories, emotions, and expectations for visitors.

GOAL 5

Create more civic engagement among the different cultures living in the neighborhood.

Objective 1: Establish locations for community gardens.

Objective 2: Limit and reduce surface parking.

Objective 3: Establish locations for plazas and open spaces.

Objective 4: Establish locations for schoolyards.

Objective 5: Re-purpose underutilized facilities and establish their functions.

PROGRAM

In creating a well designed sustainable, culturally diverse, sociable, and healthier environment for the West Washington neighborhood, careful consideration are taken in order to assure the successful development of the corridor. The final overall renewal plan covers a section of the Washington Street, just 3 miles east from downtown Indianapolis. The proposed design project site represents the area along West Washington Street with South Lyndhurst Drive as the west border and South Tibbs Avenue as the eastern boundary. The site is approximately eleven city blocks or 152 acres.
The neighborhood renewal plan includes design specifications and locations for appropriate infill of residential areas, alternative transportation routes, and green technology implementations that fit the current zoning and architectural requirements. In addition, the plan includes design suggestions for street typologies through the neighborhood. The plan also includes proposed design alternatives for the commercial area, a schematic design for a proposed gateway to the site, and the improvements of parks and civic areas within the corridor. Additionally, this development integrates community leaders responses to earlier survey on how they envision the corridor. Finally, the plan has compile a overall street guidelines that enables feature residents or commercial owners to make appropriate construction changes with out disturbing the overall character of the corridor.

OVERALL DESIGN ESSENTIAL:

Even though the proposed design has different levels of design, the goals and objectives are the same. The following list of design essential helped shaped the design process of corridor's master plan as well as the design process of the different site designs:

- Suggest new additions that reflect and honor the neighborhood.
- Encourage opportunities to increase social, physical and commercial networks.
- Suggest activities (daily, annually or seasonal) that would give unique identity to the physical settings.
- Provide open spaces, including plazas, park space, storm water plazas and civic centers.
- Connect to essential services and amenities.
- Minimized environmental impact.
- Implement self-sustainable technologies in new housing, buildings and streets.
- Invite local organizations to create support systems for similar projects.
- The use of renewable sources is encourage
- Design using compact and mixed-use development.
- Design accessible and safe pedestrian transportation networks.

SPECIFIC SITE DESIGN ESSENTIAL:

The linearity of the corridor makes it difficult to have connection between the main corridor and the adjacent neighborhood. Within the street, there are naturally occurring spatial borders or spaces. Those spaces own unique characteristics and rather than becoming something else they need to be re-design in order to be functional, attractive and accessible for the residents. The following design essential were taken into consideration when deciding the framework of each space.

COMMERCIAL AREAS:

- Encourage more local businesses and work with existing ones.
- Allow for new type of commercial facilitates.
- Reduce parking surfaces (retrofit).
- Include mixed-use development with residential, office, and retail uses.
- Include sustainable design elements, like storm water management and compact design.
- Design commercial area for redestrian use.
- Introduce new commercial facilities frontage along the corridor.

COMMUNITY CENTER:

- Design strong social spaces.
- Allow more pedestrian connectivity within the area.
- Include bus stops and shelters for the IndyGo buses along Washington Street.
- Design a community center area that is used both night and day.
- Provide different uses and activities for residents and visitors.
- Increase canopy amount by at least 50%
- Include sustainable design elements, like storm water management and mixed use design.
- Design flexible areas that can be used for multiple functions.

PARKS. OPEN SPACE. PLAZAS:

- Design a strong plaza, open space and park network within the neighborhood plan.
- Connect to nearby parks and open spaces.
- Allow at least 80% of the parks to have vegetation.
- Include native plantings.

- Design flexible areas that can be used for multiple functions.

CORRIDOR GATEWAY:

- Design a strong gateway that can serve as the corridor landmark.
- Connect to propose greenway and other pedestrian networks.
- Allow some commercial facilities in the area.
- Include sustainable design elements, like storm water management and compact design.
- Design flexible areas that can be used for multiple functions.
- Allow for service alley access.

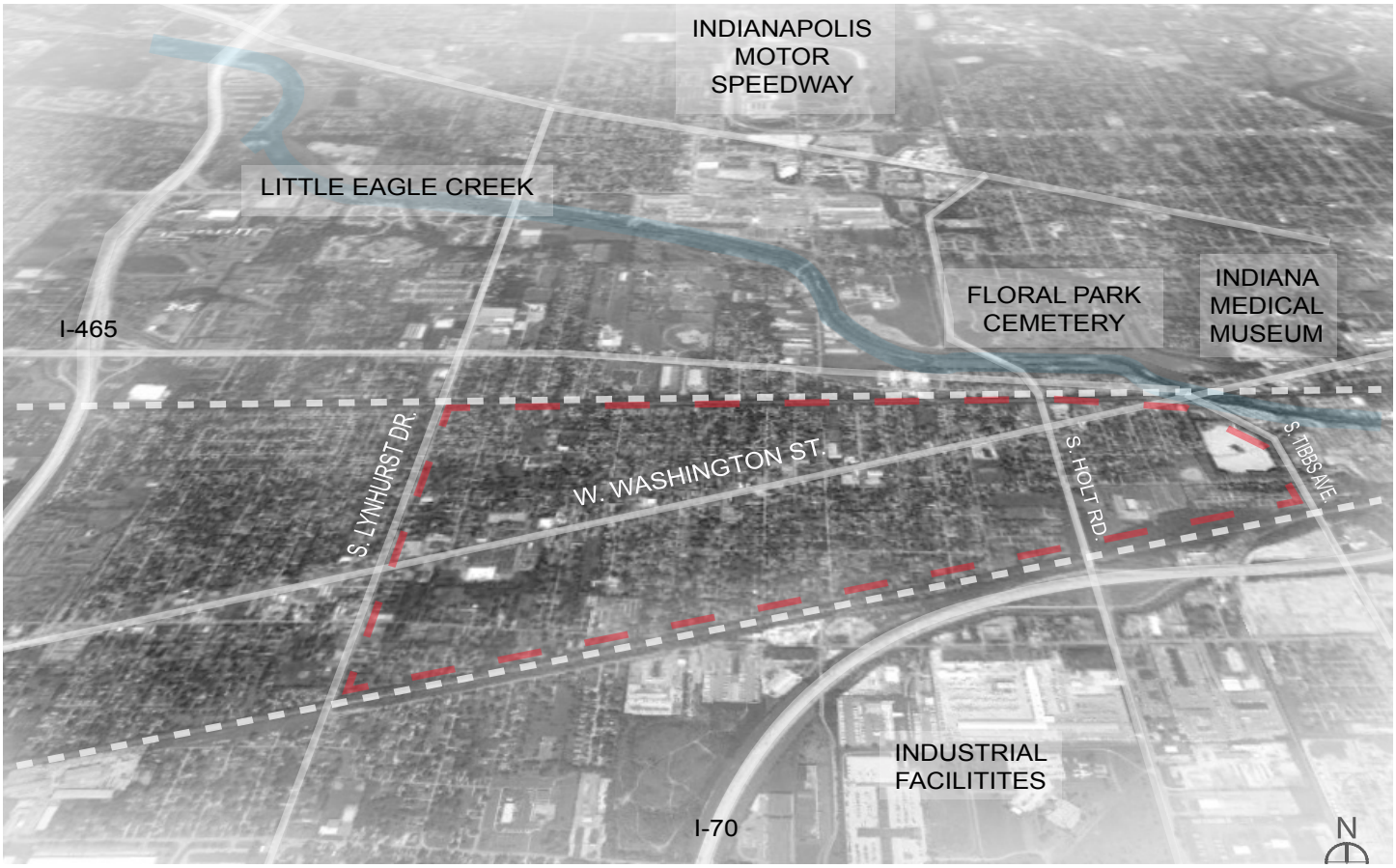
RESIDENTIAL AREAS:

- Offer affordable housings.
- Design single and multi-family housing.
- Create open spaces access for most homes.
- Design housing areas to accommodate sustainable design strategies such as storm water management, solar panels or small wind turbines.

STREETSCAPES / NEIGHBORHOOD LINKAGE:

- Include sidewalks on all streets, both sides when possible.
- Provide multi-purpose pedestrian pathways.
- Implement on-street parking where possible.
- Line the streets with trees and proper lighting.
- Design bio-swales to filter storm water runoff.
- Reduce the number of curbs.
- Create opportunities for gathering with appropriate shade and sun.

DESIGN PROCESS: METHODOLOGY



LOCATION / VICINITY

Throughout recent years, the West Washington neighborhood, located on the west side of Indianapolis, has being struggling to become a better community: Its open spaces, streets, buildings, and residents reflect the struggle.

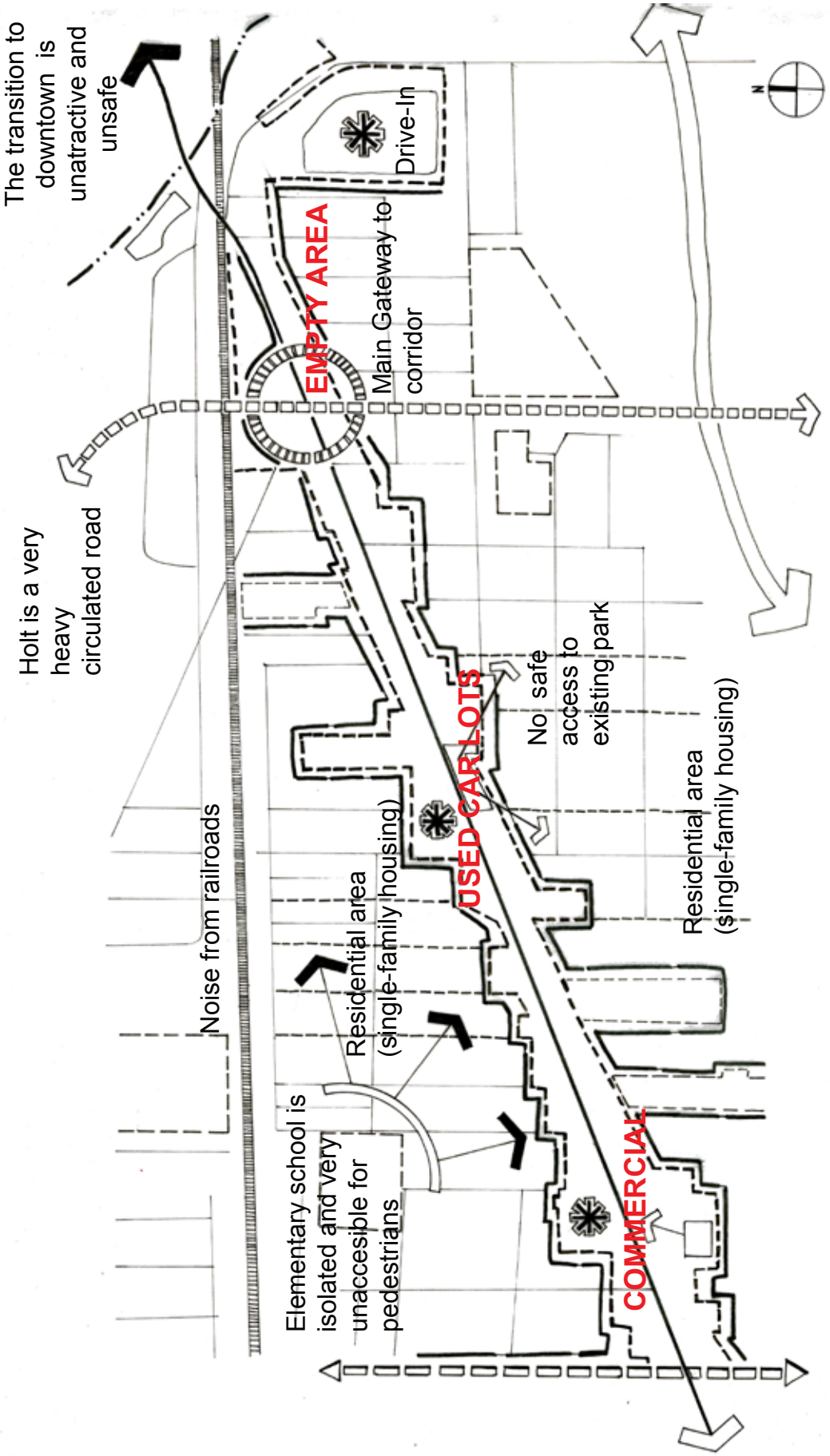
The project site is located approximately four miles west of downtown Indianapolis. Home to a abundant assets, Washington Street is one of the major east-west streets in the city. A portion of the street is part of the National Road for almost all of its length, and it is one of the few streets that completely cross the city from east to west. The street stretches from east to west and represents a major access point into downtown for residents living on the far east and west sides of Indianapolis.

The proposed design project site represents the area along West Washington Street with South Lyndhurst Drive as the west border and South Tibbs Avenue as the eastern boundary. The map above outlines the project site.

The neighborhood is a racially diverse community, but in recent years Latino residents have become the newest wave of immigrants. The contextual elements surrounding the project site include: small commercial uses such as an animal hospital, attorney offices, a local newspaper, automobile dealerships and repair shops, grocery stores, a drive-in movie theater, restaurants, gas stations, and other small businesses.

Continuing east of site, Washington Street passes by the Indianapolis Zoo, crosses the White River, and goes by the White River State Park, Indiana State Museum, the Eiteliong Museum, Victory Field, and the Indianapolis Convention Center. Just 3 miles north of the site is the Indianapolis Motor Speedway, and the Indianapolis International Airport is 9 miles west of the site.

DESIGN PROCESS: SITE / SETTING / CONTEXT



VEHICULAR CIRCULATION

- West Washington Street is a heavy traffic commuter road. There is traffic all day, and the maximum speed limit is forty miles per hour.
- West Washington is not a pedestrian-friendly road, and many accidents occur on a daily basis.

BUS STOPS

- The corridor has existing bus stops every two blocks, within walking distance.
- However, there are no bus shelters anywhere in the area.

EXISTING SITE BUILDINGS

- Most buildings on site are somewhat in good condition.
- Some buildings on the edge of the corridor are houses that have been retrofitted to serve other functions such as offices, auto-repair shops or others.

LANDUSE

- This urban neighborhood has no diverse landuse palette.
- Along the street edge is more commercial use.
- Single-family housing expands around the main corridor and green open spaces are limited.
- Access to parks or open spaces is limited due to the lack of pedestrian infrastructure that can interconnect those spaces.

RESIDENTIAL AREAS

- The interior of the neighborhood, has mainly single-family housing.
- Most houses have small lawns.
- Most residents have large driveways with little greenspace.

HIGH VOLUMES OF VEHICULAR TRAFFIC

TYPICAL BUS STOP ADJACENT TO STREET

USED CARS DEALER SHOP

NO SIDEWALKS CONNECTING TO SCHOOL

DESIGN PROCESS: SITE INVENTORY / EXISTING CONDITIONS

INFRASTRUCTURE

- Existing sidewalks along the corridor are in bad condition
- Inside neighborhoods lack sidewalks.
- The main corridor is a wide streets with no on-street parking.
- There are few mature trees along the corridor, and too many power lines. (No foliage)
- Poorly maintained streets.
- Too much pavement.

WASHINGTON STREETS

- The West Washington Street corridor is a two-way, four-lane street with a turn lane in the middle. There is no on-street parking, so parking along the corridor is a hazard. There is no visual or structural separation between buildings and street.
- The buildings adjacent to the corridor are mostly one-story commercial buildings set very close to the street
- Few sections of the street have sidewalks and not many street trees, no tree lawn, no barrier from street.
- Commercial area includes: hair salons, restaurants, offices, used car dealer ships, auto repair shops, fast food restaurants, and many churches.

ATMOSPHERE

- Is really rare to see someone walking along the street.
- Residents prefer to walk on neighborhood streets because they don't feel safe walking on Washington Street.
- Lack of continuity among the facades.
- It does not feel safe.
- Large amounts of vehicular traffic

LACK OF IDENTITY

LACK OF STREET TREES

POOR MAINTAINED PARKS

NO SENSE OF SAFETY

DESIGN PROCESS: INVENTORY & ANALYSIS

EXISTING & PROPOSED TRANSPORTATION SYSTEMS

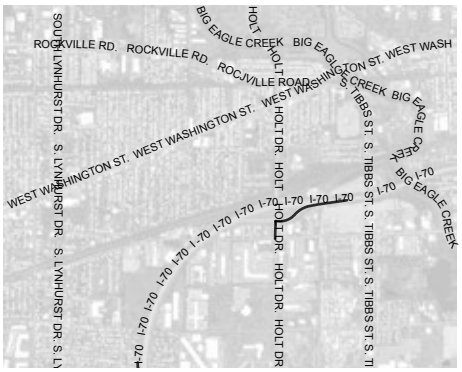


FIGURE 1.0 - MAIN STREETS

Most streets surrounding the neighborhood are major vehicular transportation routes.

FIGURE 1.2 - BUS STOPS

Existing bus stops & bus routes are located within reasonable walking distances. The existing bus route has some of the most ridership in the city.

FIGURE 1.3 - INDY CONNECT PLAN : PHASE I

The WWS corridor and adjacent streets were considered as part of a pedestrian regional plan that the city of Indianapolis has developed. For example, WWS is proposed to be a long-term bus rapid transit system.

FIGURE 4. - INDIANAPOLIS REGIONAL BIKEWAYS PLAN

The city's proposed bikeway regional plan can influence future pedestrian development in the area.

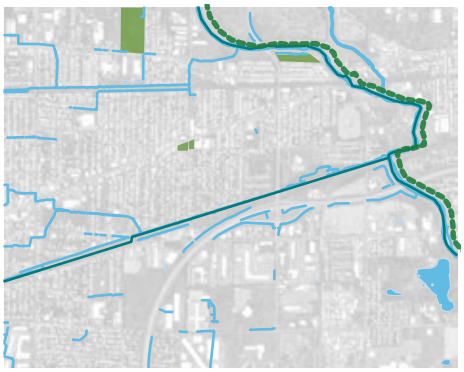


FIGURE 1.5 - PROPOSED MULTI-USE-PATH

One of the proposed multi-use pathways for the corridor can potentially be a greenway. It can also influence pedestrian accessibility to the neighborhood and to adjacent neighborhoods.

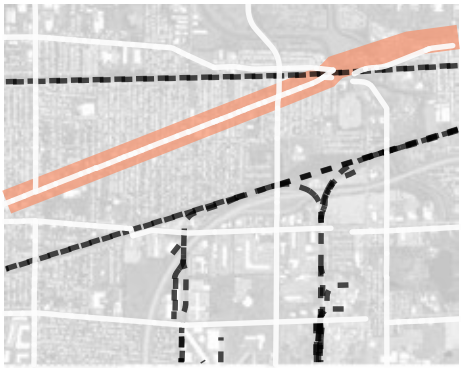


FIGURE 1.6 - SIDEWALK IMPROVEMENTS

Streets adjacent to the main corridor are part of a plan that will improve existing pedestrian infrastructure.

DESIGN PROCESS: INVENTORY & ANALYSIS

EXISTING BUS STOPS & TRANSPORTATION SERVICES

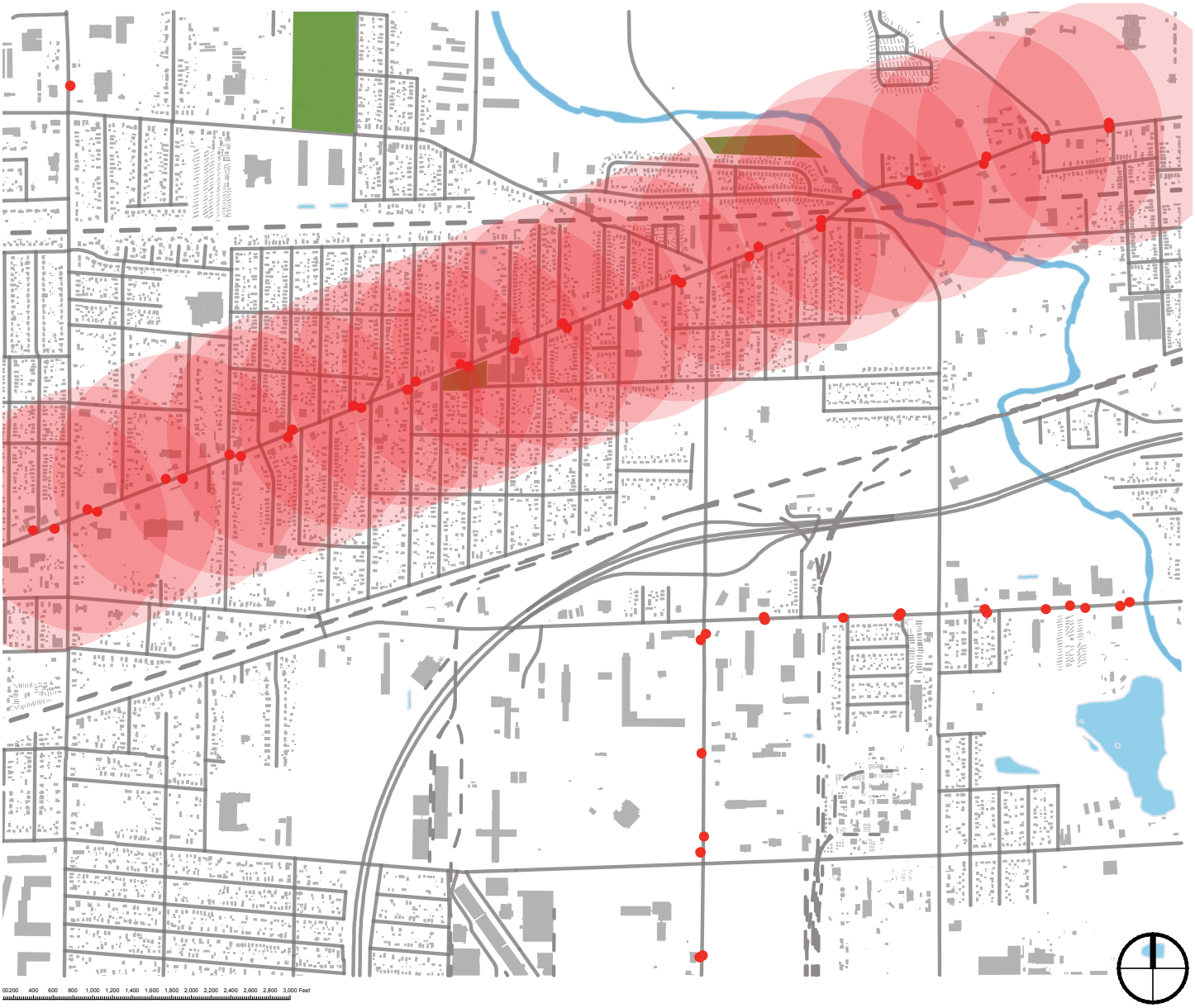


FIGURE 1.7 - EXISTING BUS STOPS & TRANSPORTATION SERVICES

The proposed neighborhood renewal site is well served by a bus loop going from east to west. There are several bus stops located along West Washington Street, and most are within walking distance.

VACANT PROPERTY

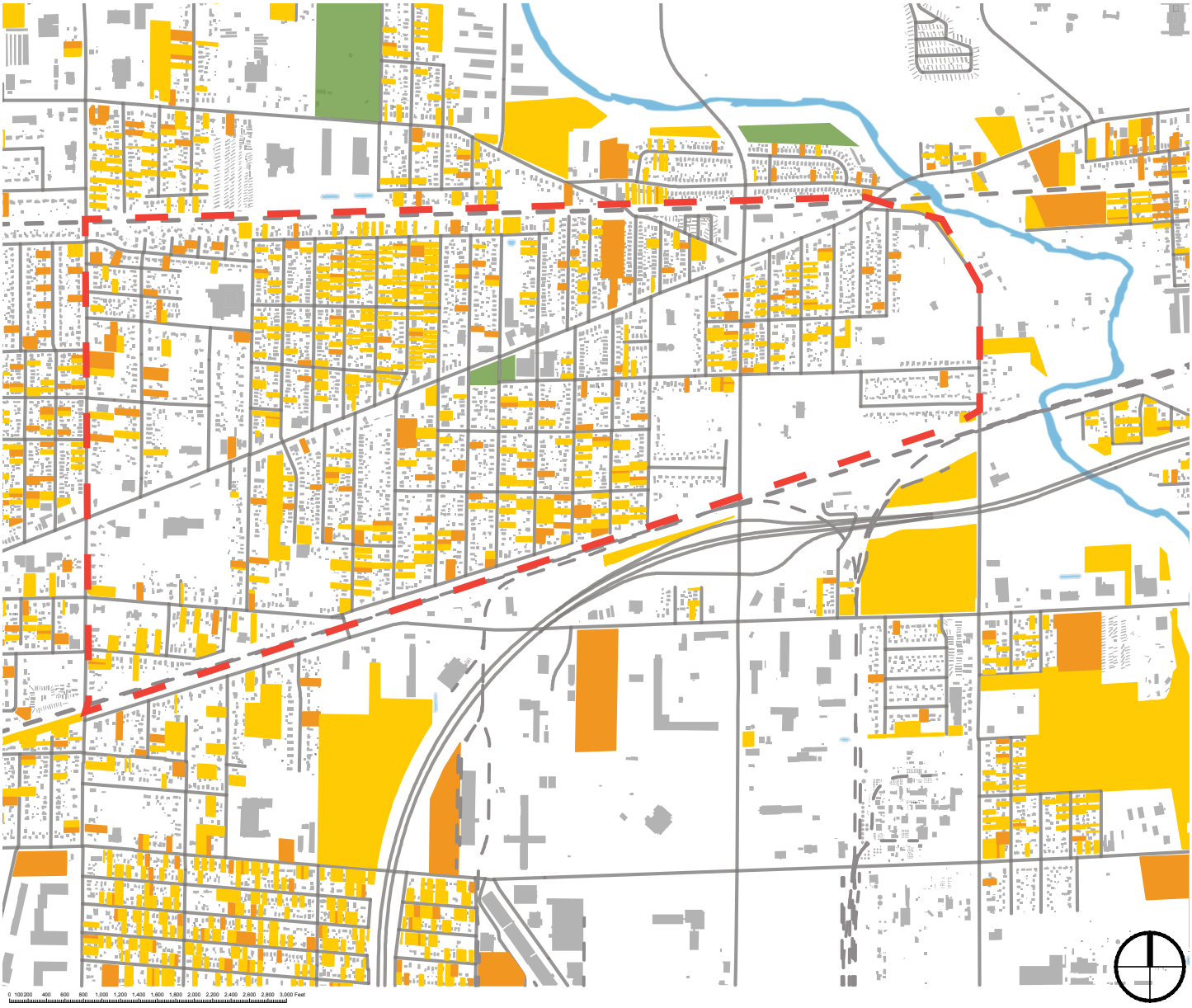


FIGURE 1.8 - VACANT PROPERTY

Areas with moderate land and building vacancy show greater potential for smaller types of development. In this scenario, vacant properties are scattered throughout the residential areas, so neighborhoods are more likely to retain their identity, and vacant spaces can become small pocket parks, vegetable gardens, or self-sustainable houses. Residents are encouraged to take title to adjacent lots and become responsible for their maintenance, but they can be productive land. Moreover, the underutilized facilities can be adapted to create more civic engagement among residents.

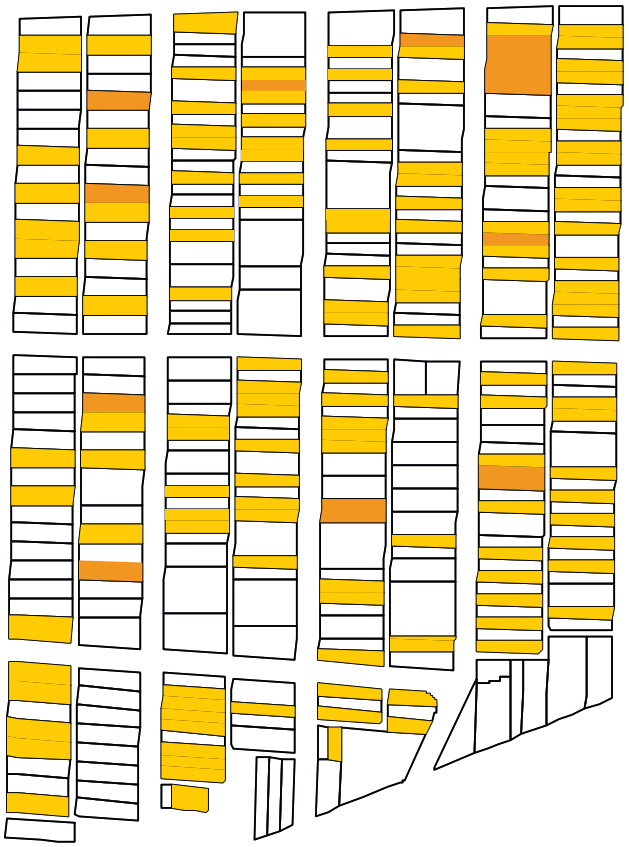


FIGURE 1.0 - SCENARIO #1
VACANT PROPERTY

Some areas of the neighborhood have higher land and building vacancy. This specific scenario sows how some vacant properties are within proximity of each other. These areas have largely lost their residential character and have the best potential for meeting future sustainable housing.

VACANT LAND (ASSESSMENT RECORDS)

VACANT PROPERTY (ACCORDING TO USPS)

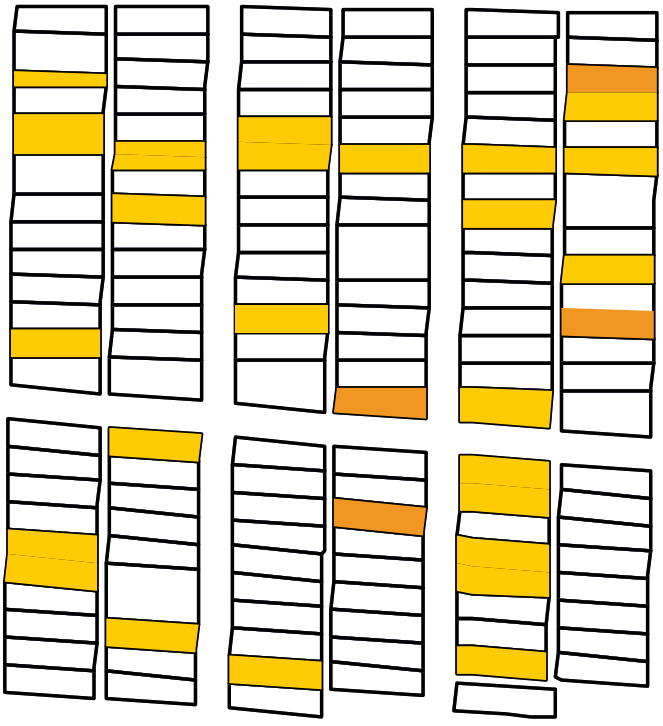


FIGURE 1.10 - SCENARIO #2

Areas with moderate land and building vacancy show greater potential for smaller types of development. In this scenario, the vacant properties are more apart from each other and are less apparent in the landscape. Since these areas are more likely to retain their identity, these spaces can become small pocket parks, vegetable gardens, or self-sustainable houses.

VACANT LAND (ASSESSMENT RECORDS)

VACANT PROPERTY (ACCORDING TO USPS)

DESIGN PROCESS: INVENTORY & ANALYSIS

EXISTING PARK SPACE

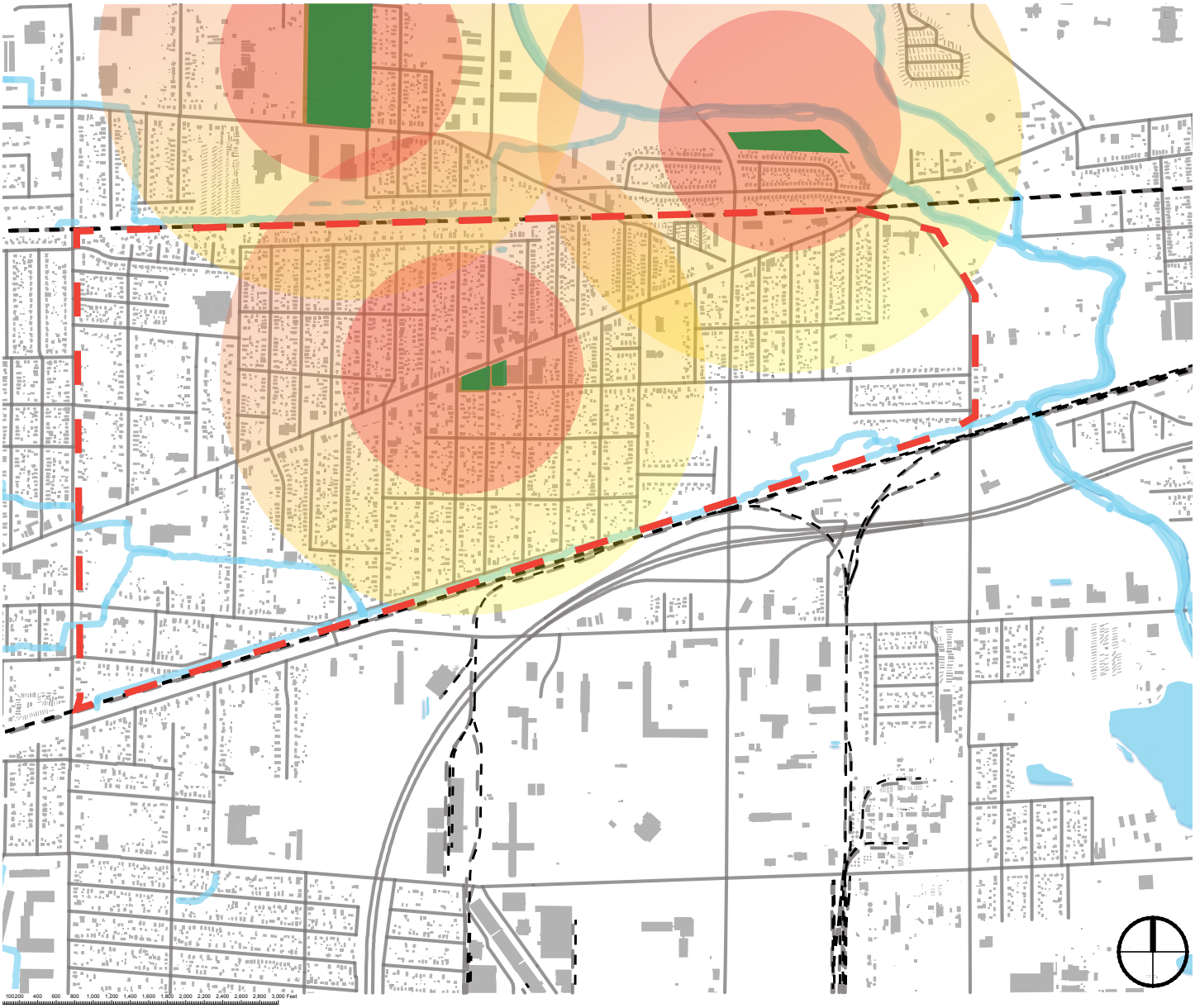


FIGURE 2.0 - EXISTING PARK SPACE

The neighborhood only has one small park located next to Washington Street. There are two more parks near the neighborhood, but neither is within easy walking distance. The only safe way to visit these two other parks is by vehicle because walking is very dangerous. Furthermore, the parks are not well kept and are only accessible during daytime.

SITE VEGETATION

FIGURE 2.2 - SITE VEGETATION

According to this map, paved areas predominate along the corridor. The amount of vegetation in the areas is not much but can be increased. This maps also illustrates the lack of street trees along West Washington Street.

EXISTING VEGETATION

PAVED AREAS

PAVED AREA

SITE VEGETATION

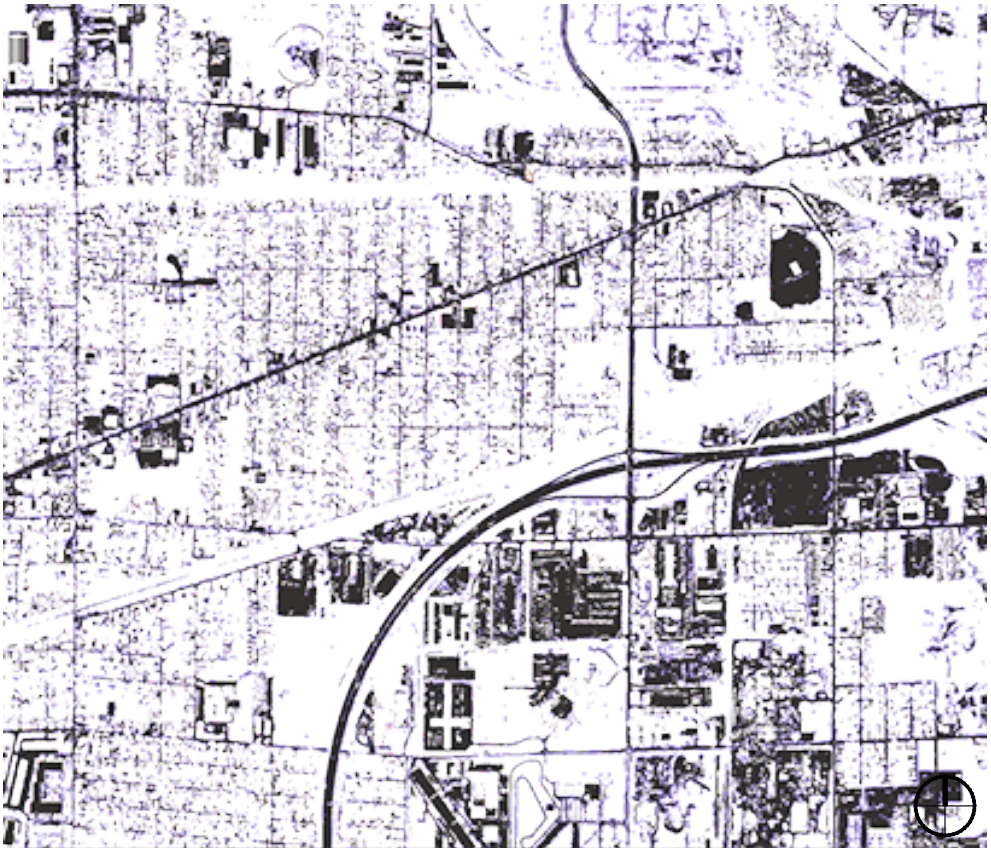


FIGURE 2.3 - PAVED AREAS

Most streets surrounding the neighborhood lack any type of vegetation.

EXISTING VEGETATION

PAVED AREA

PAVED AREA OR ROOF TOPS

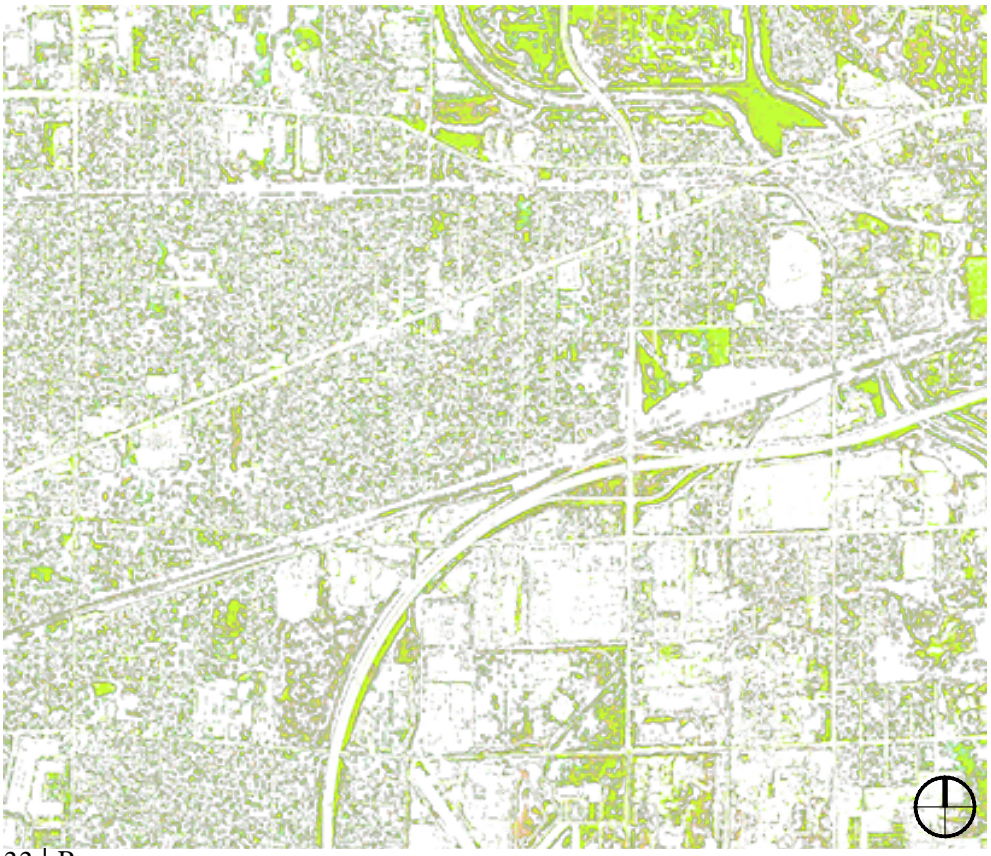


FIGURE 2.4 - SITE VEGETATION

Building roof tops can also increase the heat island effect in the corridor.

EXISTING VEGETATION

PAVED AREA OR ROOF TOPS

PAVED AREA

SITE TOPOGRAPHY

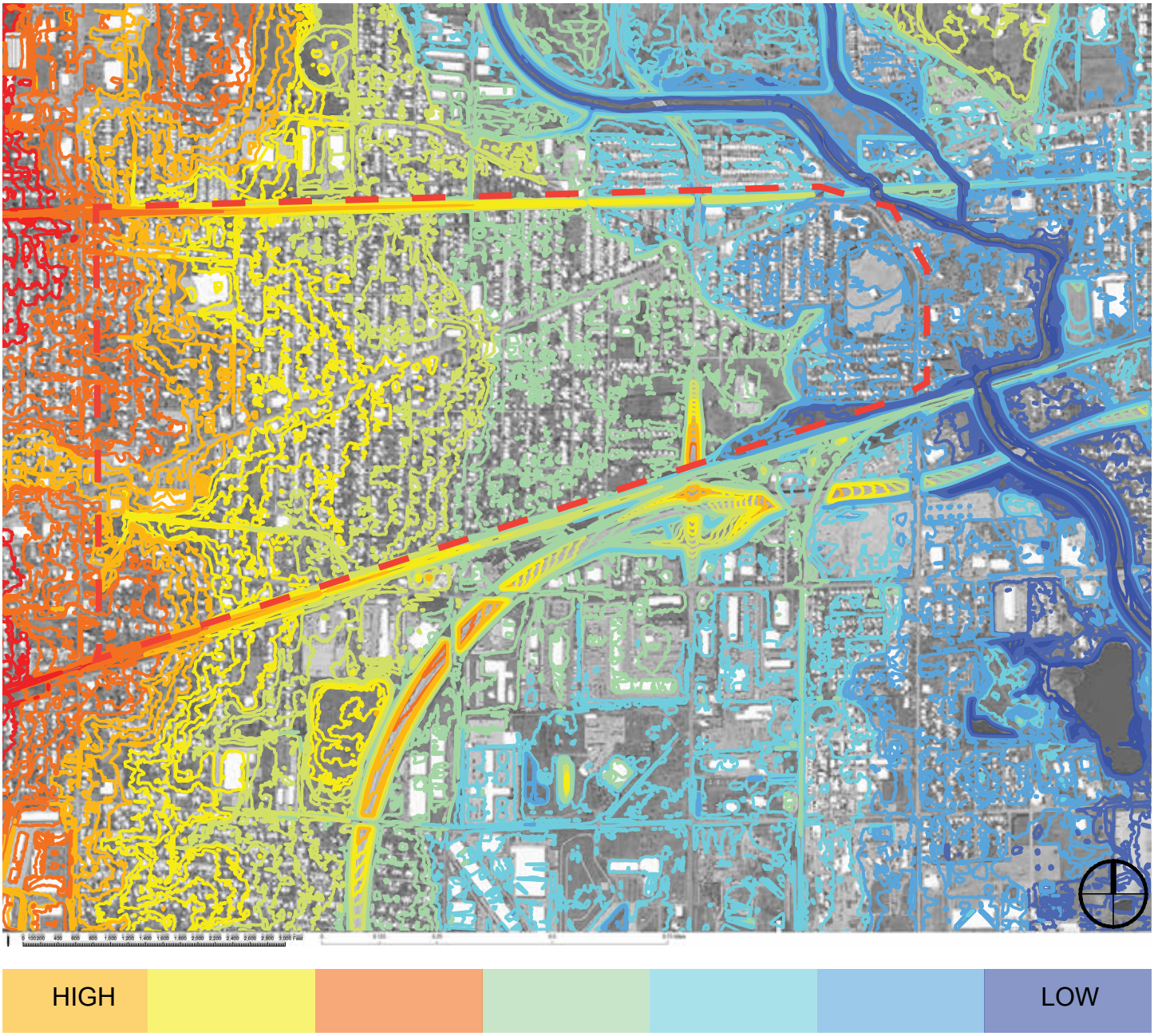


FIGURE 2.5 - SITE TOPOGRAPHY

At first glance, the site's topography seems flat, but the analysis showed small topographical changes. Altough these are minimal, they suggest that water runoff is traveling to the east side of the site toward Little Eagle Creek. The different pollutants coming from the used car dealership facilities probably pollute most of the water runoff traveling east.

SITE DRAINAGE

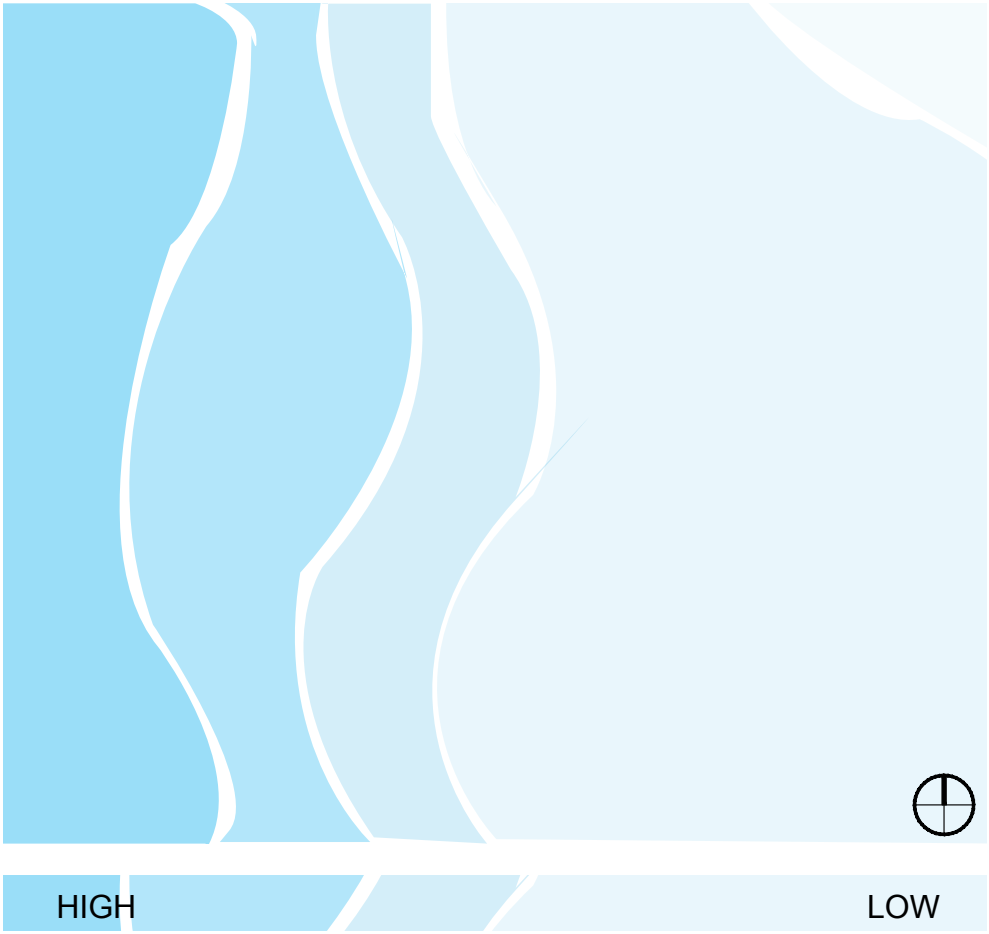


FIGURE 2.6 - SITE DRAINAGE DIRECTION

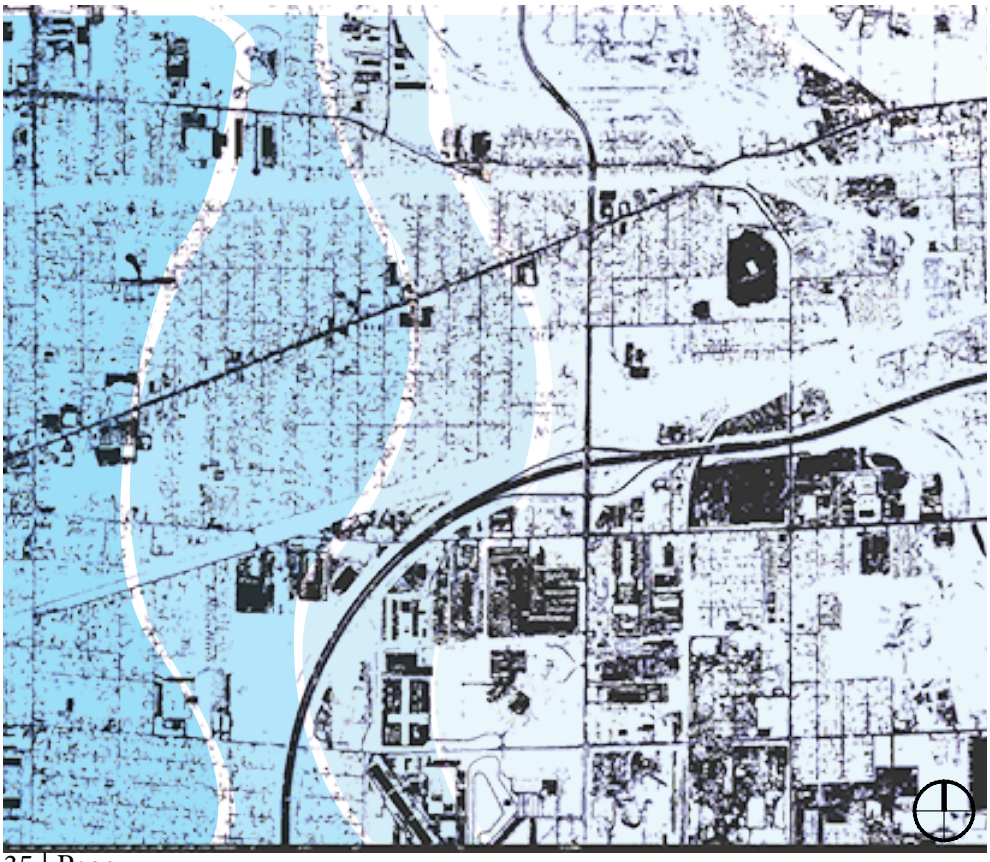
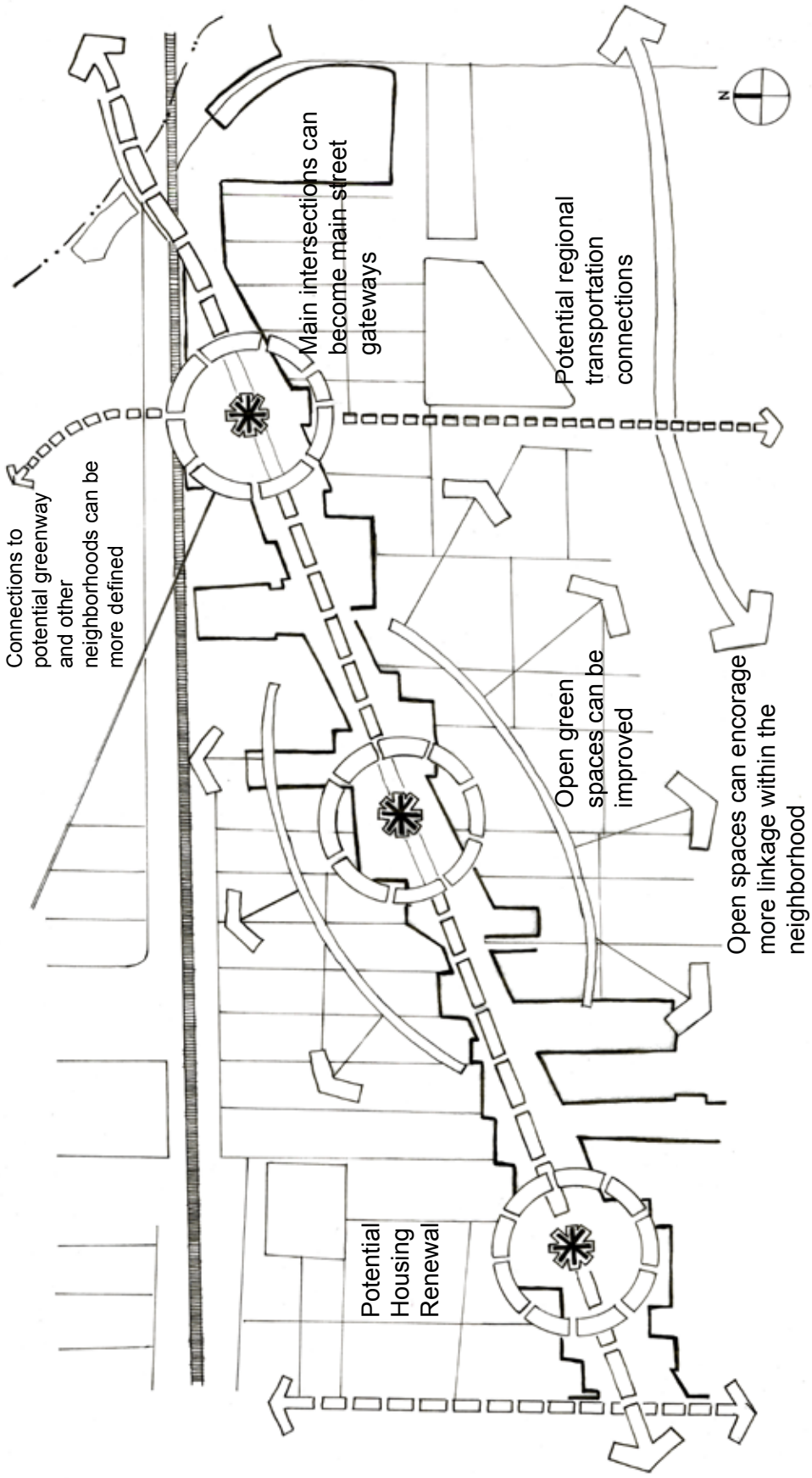


FIGURE 2.7 - SITE DRAINAGE OVER PAVED AREAS

DESIGN PROCESS: INVENTORY OBSERVATIONS

FIGURE 2.8 - INVENTORY OBSERVATIONS



CASE STUDIES: ELWOOD AVE., BUFFALO, NY

PROJECT DESCRIPTION:

It is a beautiful, fun and vibrant street and neighborhood.

APPLICATION TO WEST: WASHINGTON:

- Access & Linkages.
- Accessible by several bus lines.
- Accessible by vehicular and pedestrian traffic.

USES & ACTIVITIES

Use all year long

Seasonal festivals

Many amenities:

-Night life

-Different food choices

-Variety of shops

SOCIABILITY

- Outdoor seating used at all times.
- Fun and artistic mood.
- People visit in groups and alone.
- Many “people watching people” opportunities

CASE STUDIES: PRESIDENT CLINTON AVE., LITTLE ROCK, AZ

PROJECT DESCRIPTION:

President Clinton Avenue is a six-block pedestrian corridor that offers many excitements, including cultural, entertainment, retail and gathering areas.

APPLICATION TO WEST WASHINGTON:

- Comfort and image
- Clean
- History and excitement
- Safe night life
- Available seatting

USES & ACTIVITIES

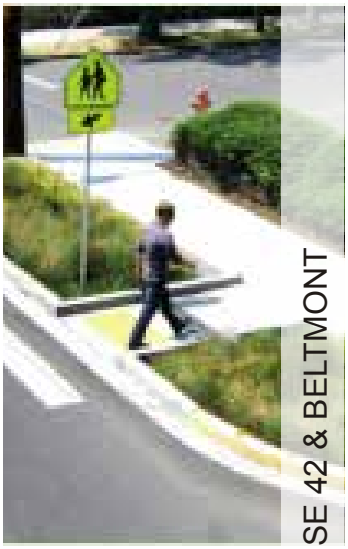
- Local street musicians
- Restaurants
- Functional facilitites

SOCIABILITY

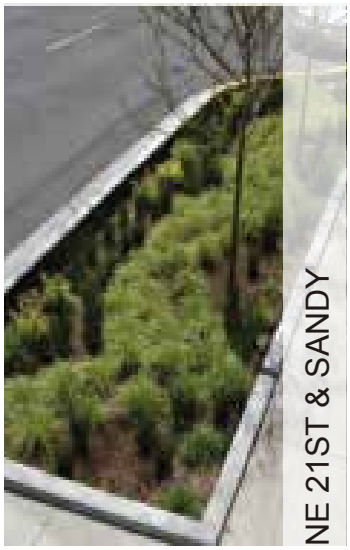
- Visible relaxation areas
- Interaction between residents and visitors.
- Local park is an icon for the community and atracts pedestrians and visitors.

SE 55TH & BELTMONT

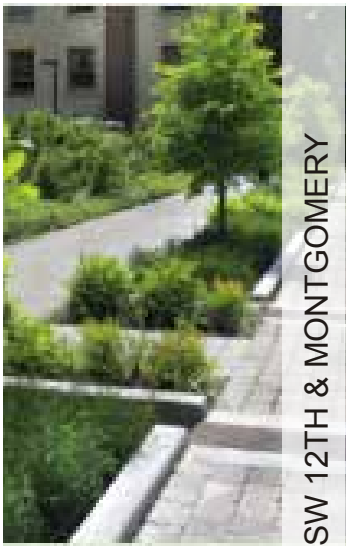
SE CLAY STREET / PPC CLIMP PLAZA



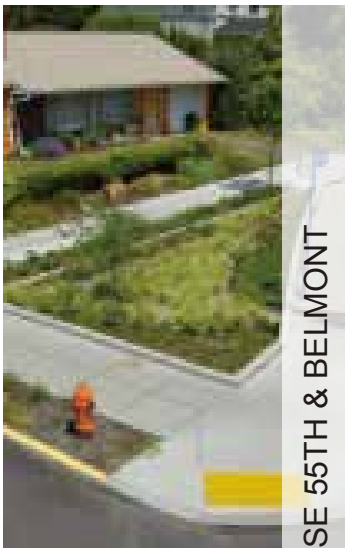
SE 42 & BELTMONT



NE 21ST & SANDY



SW 12TH & MONTGOMERY



SE 55TH & BELMONT

CASE STUDIES: ELWOOD AVE., BUFFALO, NY

PROJECT DESCRIPTION:

The green streets program utilized a combination of policy, public education, and on-the-ground projects to incorporate natural functions into existing infrastructure to complement, enhance and strengthen the city's water quality.

APPLICATION TO WEST WASHINGTON:

- Improves environmental performance.
- Cleans water runoff.
- Reduces pervious surfaces.
- Enhances bicycle safety and access.
- Minimizes parking impact.
- Educational
- Enhances pedestrian access.
- Maintains streets use.
- Teaches about environmental issues and other environmental problems.

GREEN TECHNOLOGY:

- Different methods of green technology fit into different contextual settings.
  - Bioswales
  - Raingardens
  - Vegetated vurb extensions
  - Storm water plazas
  - Pervious pavement
  - Storm water catching infrastructures

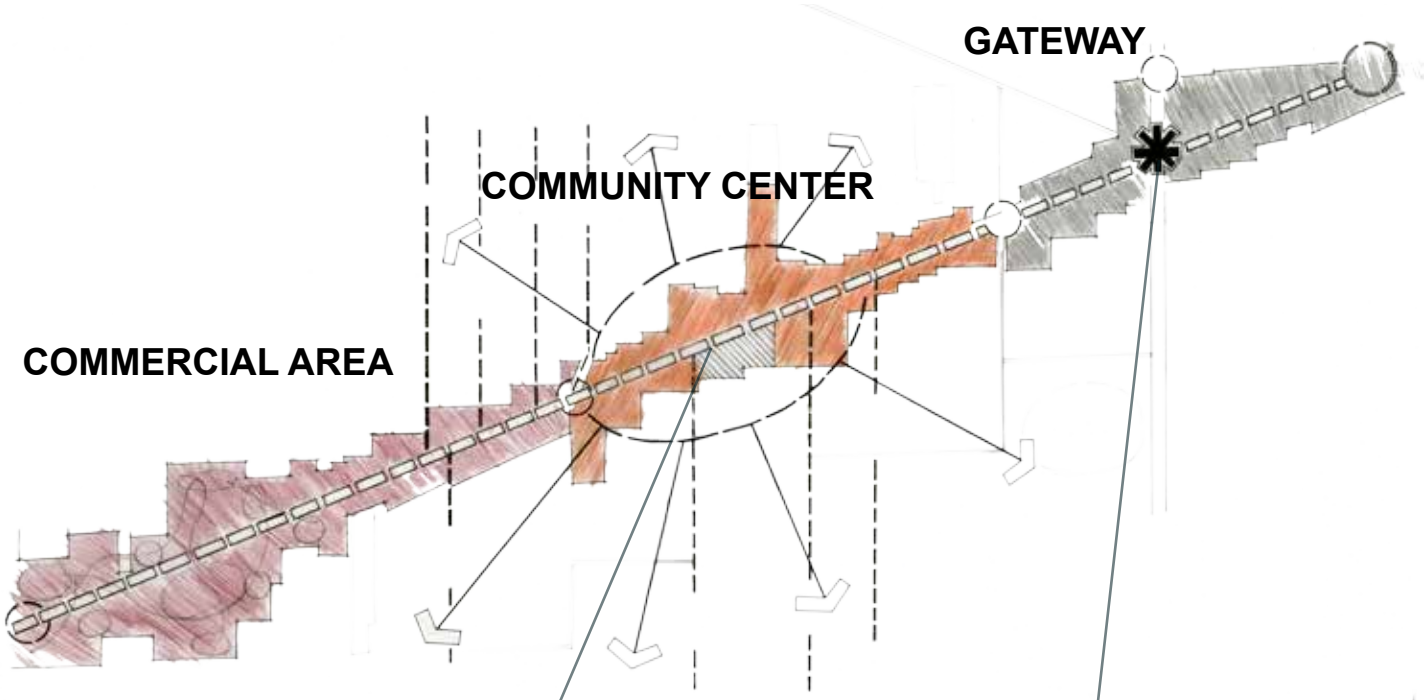
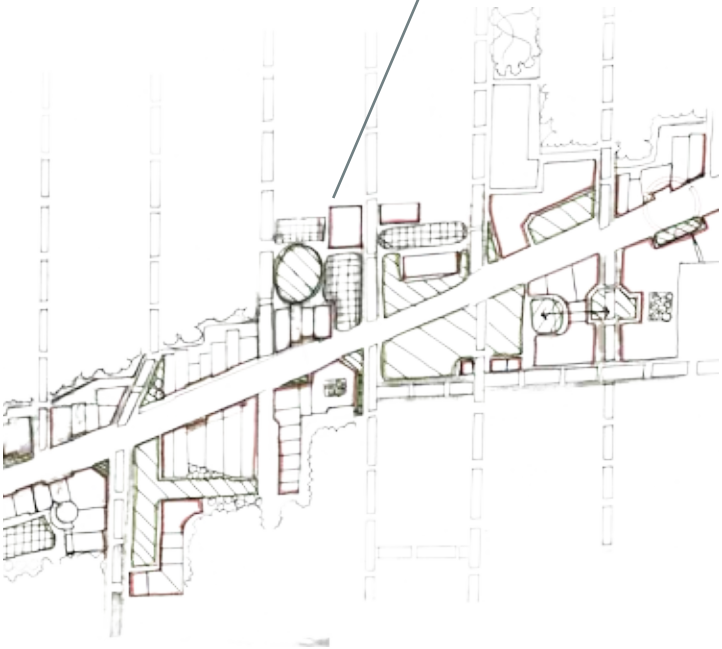


FIGURE 2.9 - APPROACH TO DESIGN CONCEPT

The project approach for the design of the corridor was to optimize existing spatial characteristics. By improving what is already there, the community would be more likely to accept the project. Furthermore, the proposed design approach could be less expensive and more sustainable in the long term.



DESIGN PROCESS: SCHEMATIC DESIGN
COMMERCIAL AREA

The concept design intends for the community center area to create identity, quality of spaces, and more pedestrian connectivity for the community. The qualities of the spaces are improved by creating civic outdoor areas. Moreover, there is more spatial organization within open spaces and facilitates.

FIGURE 2.10 - APPROACH TO DESIGN CONCEPT

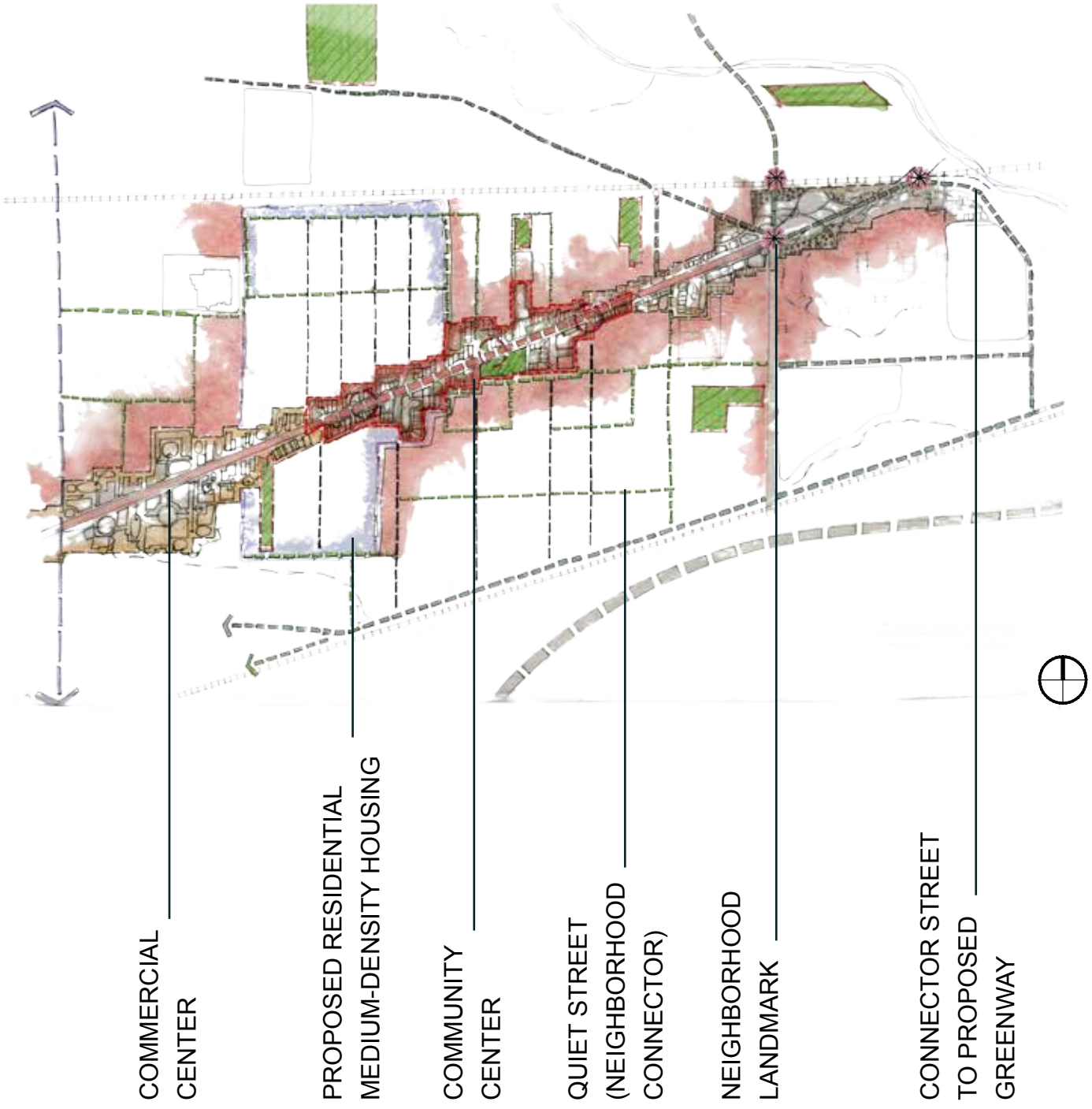
DESIGN PROCESS: SCHEMATIC DESIGN
CORRIDOR'S GATEWAY

West Washington Street is mainly known for all the used car facilities along the corridor. These projects suggest that one of the main intersections on site (Holt Street and W. Washington Streets) could become the corridors' main gateway. The schematic design of this area could be an environmental statement. The design can showcase the corridor's commitment to social, economic, and cultural sustainability.

FIGURE 3.0 - APPROACH TO DESIGN CONCEPT

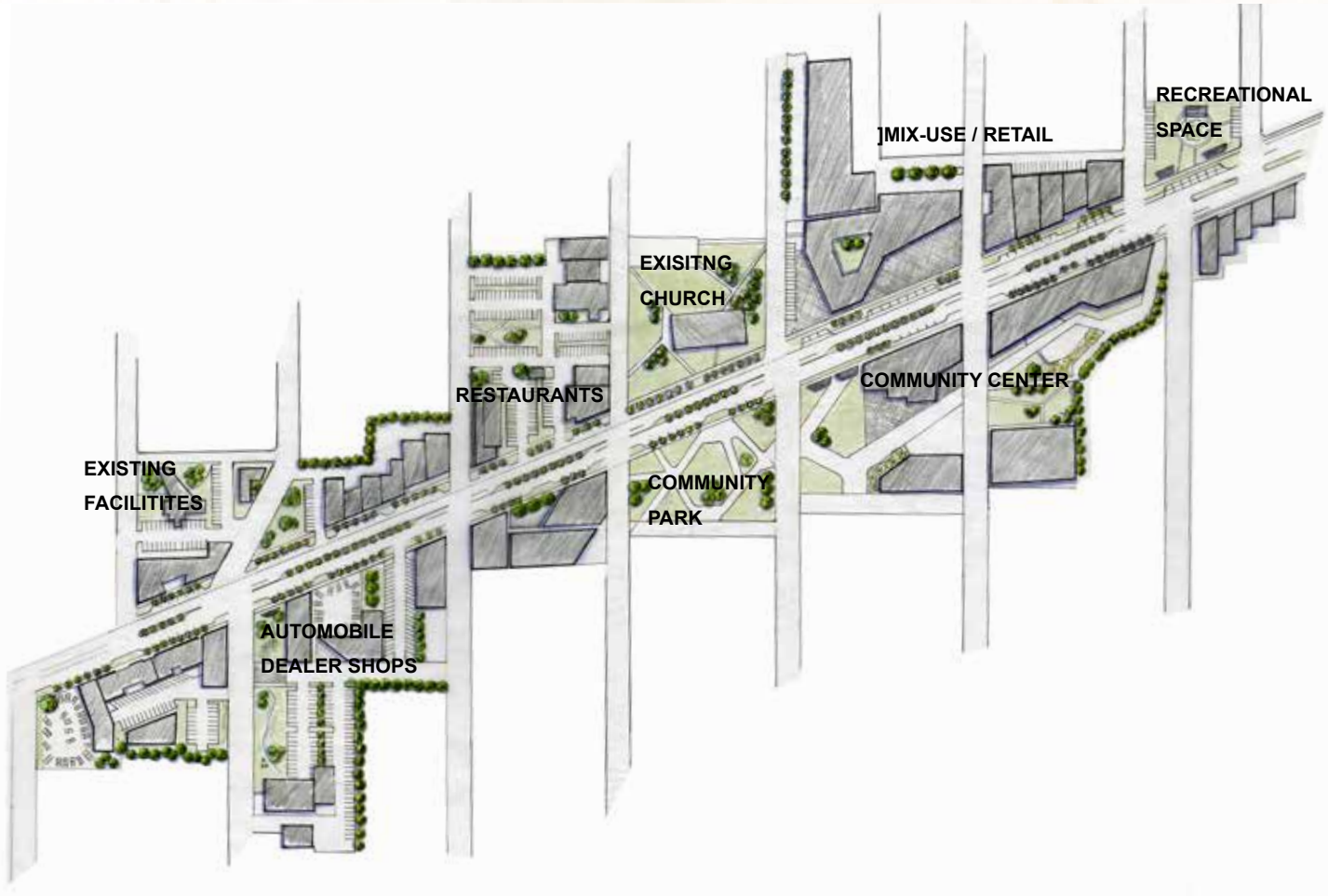
DESIGN PROCESS: FINAL CORRIDOR MASTER PLAN

The schematic design of the corridor highlights environment, economical and societal aspects that are important in planning a more sustainable neighborhood. Moreover, the physical appearance, activities, and meaning together, are fundamental components of our experience of a place. The concept also reflects the character of the neighborhood while creating a relationship between the main street and its adjacent buildings. The design suggests the corridor as a destination point rather than a transportation channel. Some design solutions accommodate a sustainable environment, healthier lifestyles, and better amenities that serve residents while hosting design elements that reflect and honor the neighborhood's unique culture and diversity.



SITE MASTER PLAN: SITE PLAN CONCEPT

The concept for the community center section of the corridor is to achieve a multi-modal, green, and identifiable space. Additionally, the design adds character and personality through physical elements and activities. The design uses the characteristics and conceptual elements of a weaving basket as an inspiration. Being a very culturally diverse neighborhood, the idea of an interweaving basket adds cohesiveness to the design. The weaving basket concept is also integrated into the paving patterns and street furniture. Furthermore, the idea of the weaving basket means that West Washington is in the stage of becoming a closer neighborhood. The interweaving basket also suggests the integration of surrounding neighborhoods and creating a bigger system.



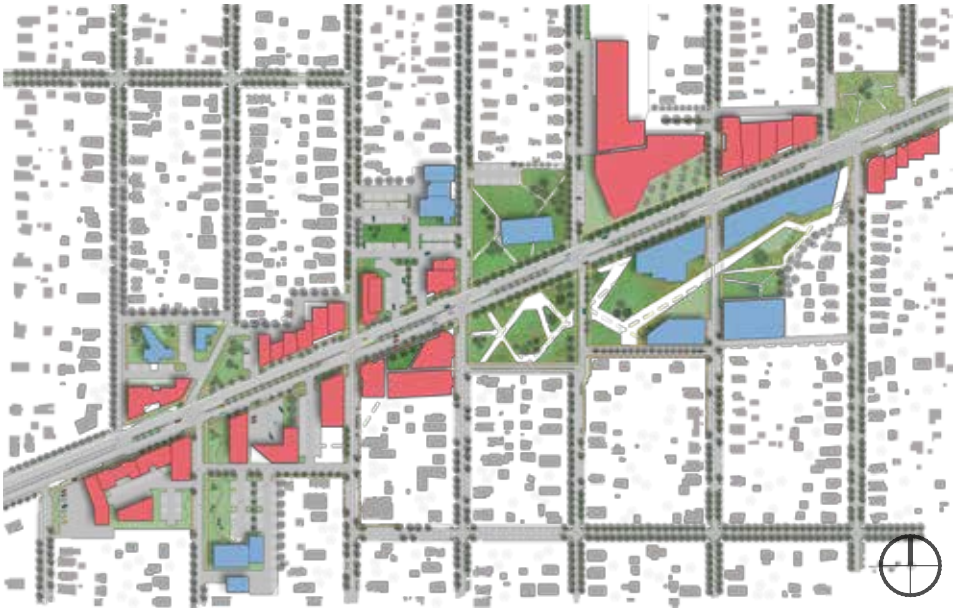


FIGURE 3.1 - LANDS USE

West Washington Street residents require a diverse land use palette. The design helped create a more dynamic an exciting urban neighborhood.

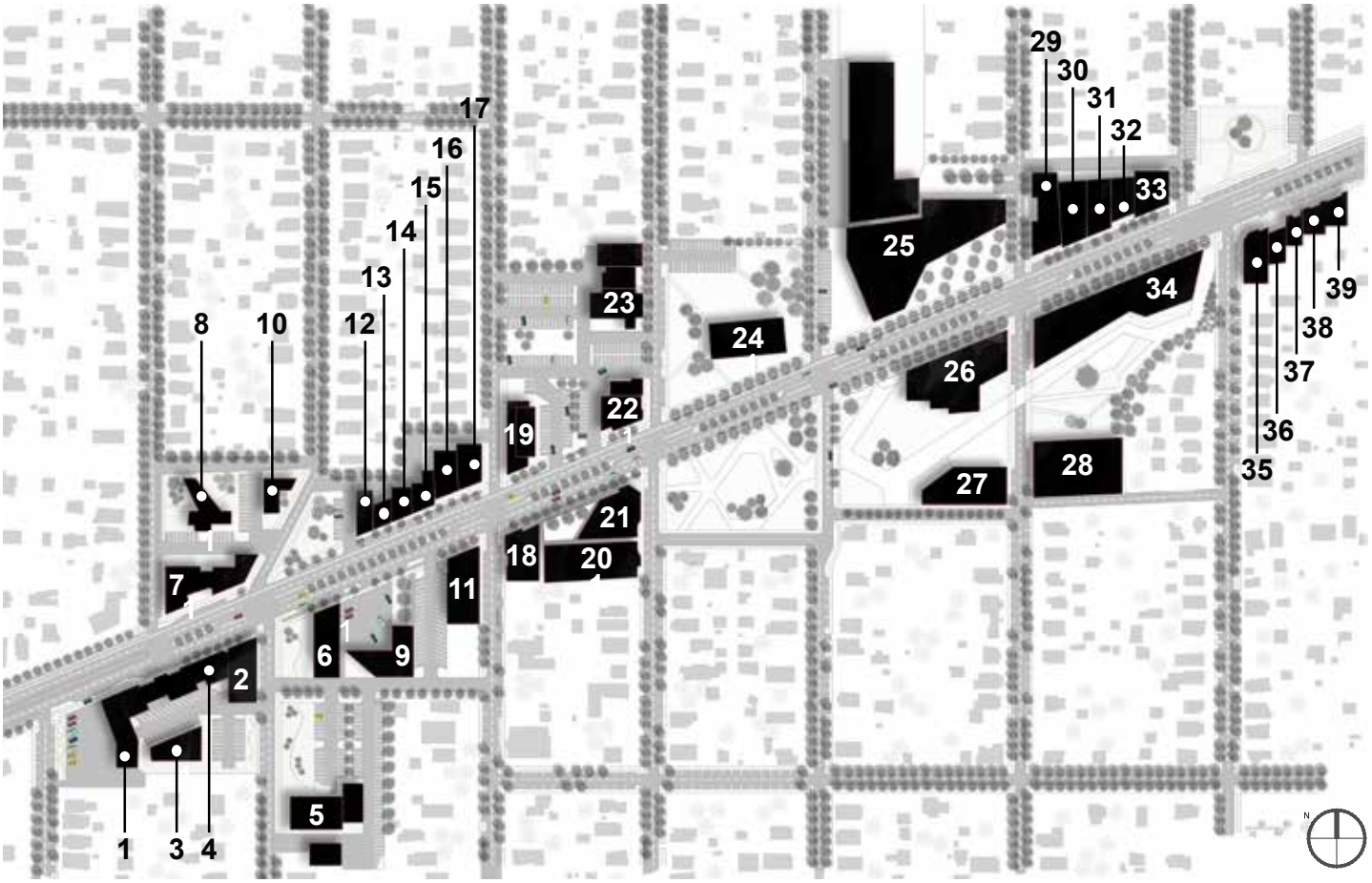
FIGURE 3.2 - PEDESTRIAN NETWORK

The new design development is supported by different range of street systems. Additionally, the proposed street systems connecte throughout the corridor and to surrounding context.

FIGURE 3.3 - OPEN SPACE ACCESSIBILITY

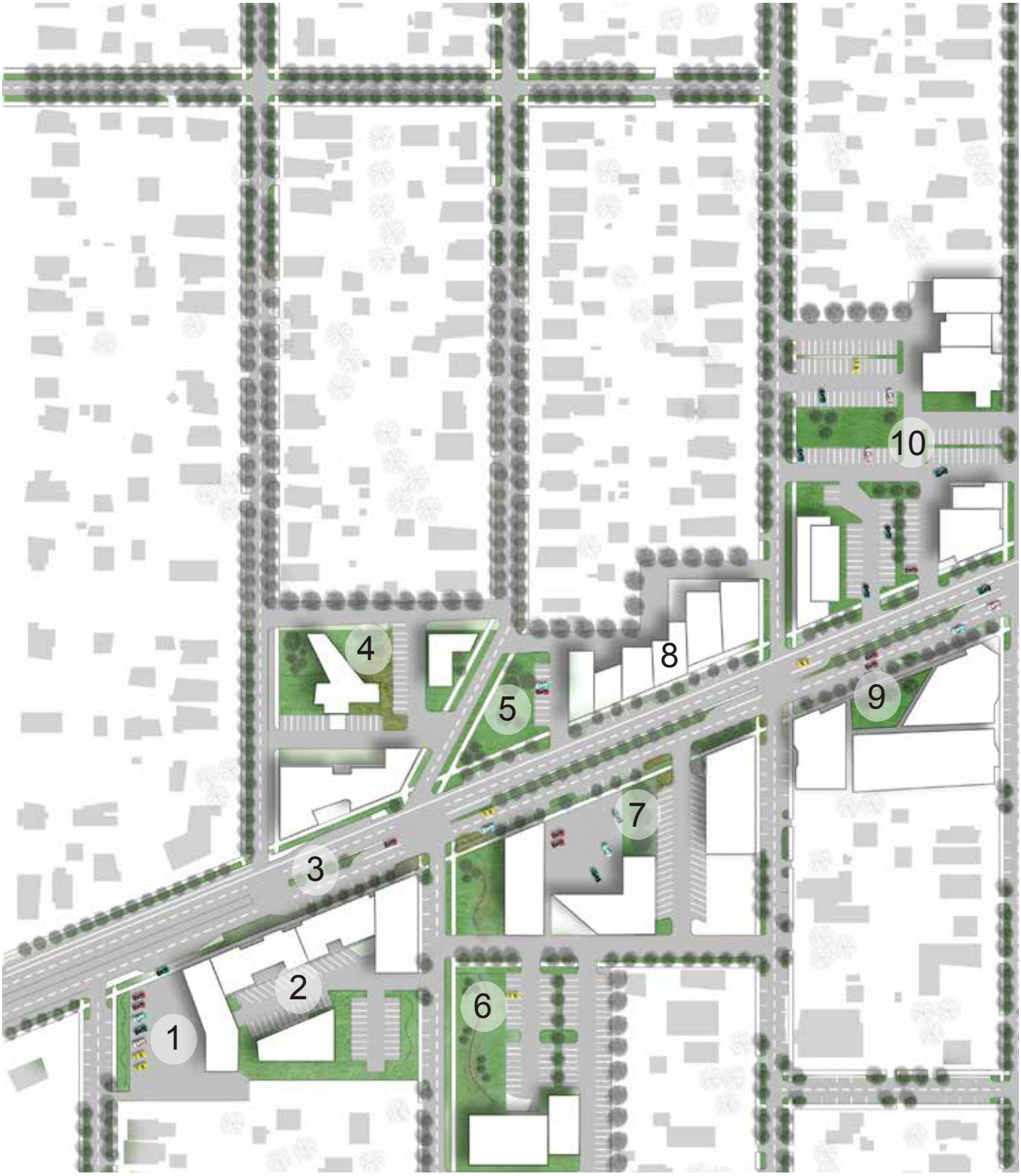
The community center design integrates open spaces, plazas, streetscapes and small pocket parks along the corridor.
The design allows a spatial relationship between the street and these series of open spaces. The open space system creates new and desirable recreational opportunities for pedestrians.

FIGURE 3.4 -CONCEPTUAL DIAGRAMS



COMMUNITY CENTER - BUILDING FUNCTIONS

1 USED CAR SHOP
2 AUTO REPAIR
3 AUTO REPAIR
4 TIRE SHOP
5 OPEN SPACE
6 CHURCH
7 CAR DEALERSHIP
8 RESTAURANT
9 COMMUNITY NEWS
10 DELI
11 CAR REPAIR SHOP
12 BAKERY
13 DELI
14 TAX OFFICE
15 RETAIL
16 RETAIL
17 LEVI STORE
18 CAR BODY SHOP
19 OFFICE
20 BODY SHOP
21 BODY SHOP
22 RETAIL
23 CHURCH
24 CHURCH
25 MOTORBIKE SHOP
26 LIBRARY
27 COMMUNITY CENTER
28 SPORTS FIELDS
29 RESTAURANTS
30 RETAIL
31 RESTAURANT
32 COFFEE SHOP
33 DELI
34 COMMUNITY CENTER
35 RESTAURANT
36 GROCERY STORE
37 LOCAL SHOPS
38 LOCAL SHOPS
39 RETAIL / MIXED USE

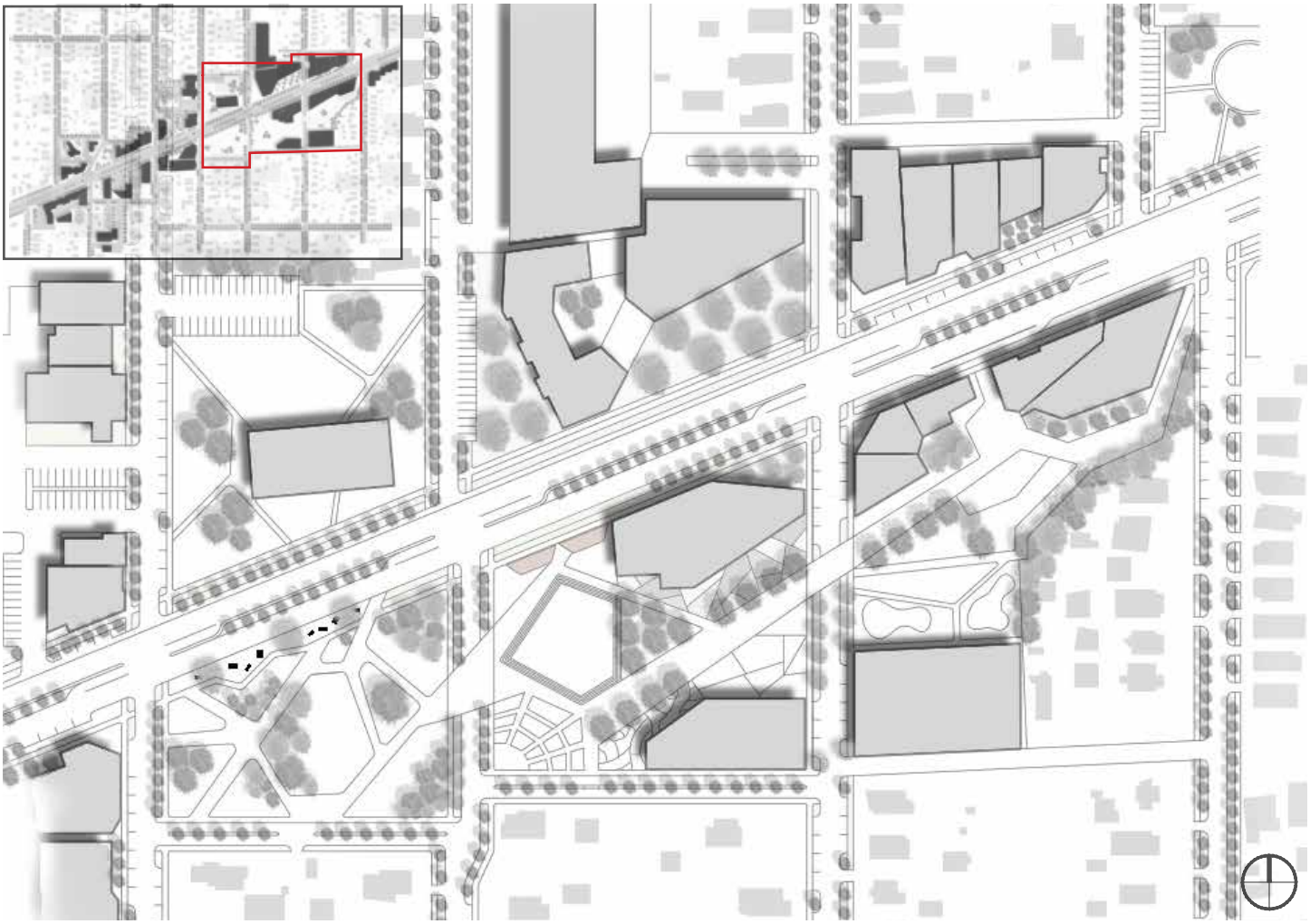


SITE MASTER PLAN: COMMUNITY CENTER

1 RETROFITTED PARKING
2 TIRE SHOP PARKING
3 VEGETATED MEDIAN
4 COMMUNITY NEWS
5 OPEN SPACE
6 STORMWATER PLAZA
7 OFF-STREET PLAZA
8 RETAIL/ MIXED USE
9 OFF-STREET PLAZA

10 SHARED PARKING
11 OPEN SPACE
12 NEIGHBORHOOD PARK
13 MOTORCYCLE PLAZA
14 LEARNING PLAZA
15 PLAY AREA
16 RETAIL/MIX USE
17 COMMUNITY CENTER
18 STORMWATER PLAZA

SITE MASTER PLAN: WEST WASHINGTON FAMILY PARK



Elaborating further detail in this design required a smaller site. Choosing the most central section of the corridor for a detail design created opportunities for social and cultural dynamics, while encouraging physical activities and wellness lifestyles in the community. Greater connections to the neighborhood were also established. The West Washington Family Park design increase social, educational, and cultural opportunities by providing a range of indoor and outdoor spaces that are desired by a wide range of users (see figure2.22). The master plan combines elements such as open space accessibility, buildings functionality, and others to achieve a greater quality of life.

FIGURE 3.5 - WEST WASHINGTON COMMUNITY CENTER

The West Washington Family Park main concept is to be the primary open space that can served as the social focus for the neighborhood.

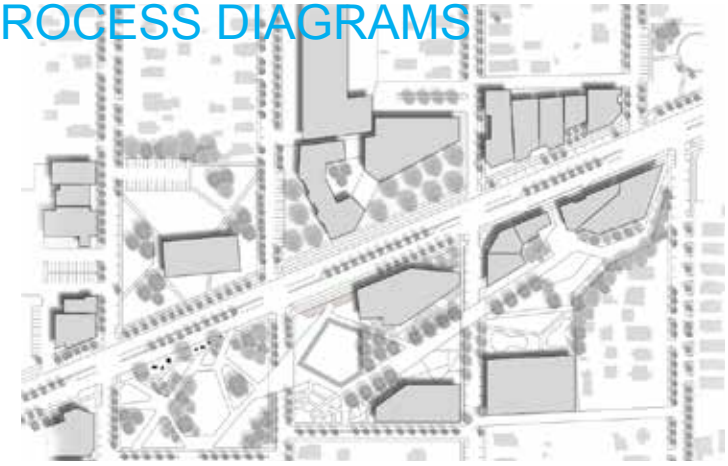


FIGURE 3.6 - OPEN SPACE ACCESSIBILITY

The first layer of the neighborhood's central open space analyzed the different accessible point for residents, pedestrians and visitors. It was important to make the space accessible for visitors but it was more important to increase the accessibility for residents.

FIGURE 3.7 - BUILDINGS FUNCTIONALITY IN RELATION TO OPEN SPACES

Many times, buildings adjacent to plazas or parks are inappropriate because they don't provide services needed by the people. For this reason, another layer of the design thought about the function that each building would serve and how they would relate to the open spaces.

FIGURE 3.8 - OPEN SPACES IN RELATION TO NEIGHBORHOOD

Accessible points for residents into the family park were established in one of the previous design phases but it was of equal importance to provide vehicular access from the neighborhood into the main corridor.

SITE MASTER PLAN: DESIGN PROCESS DIAGRAMS

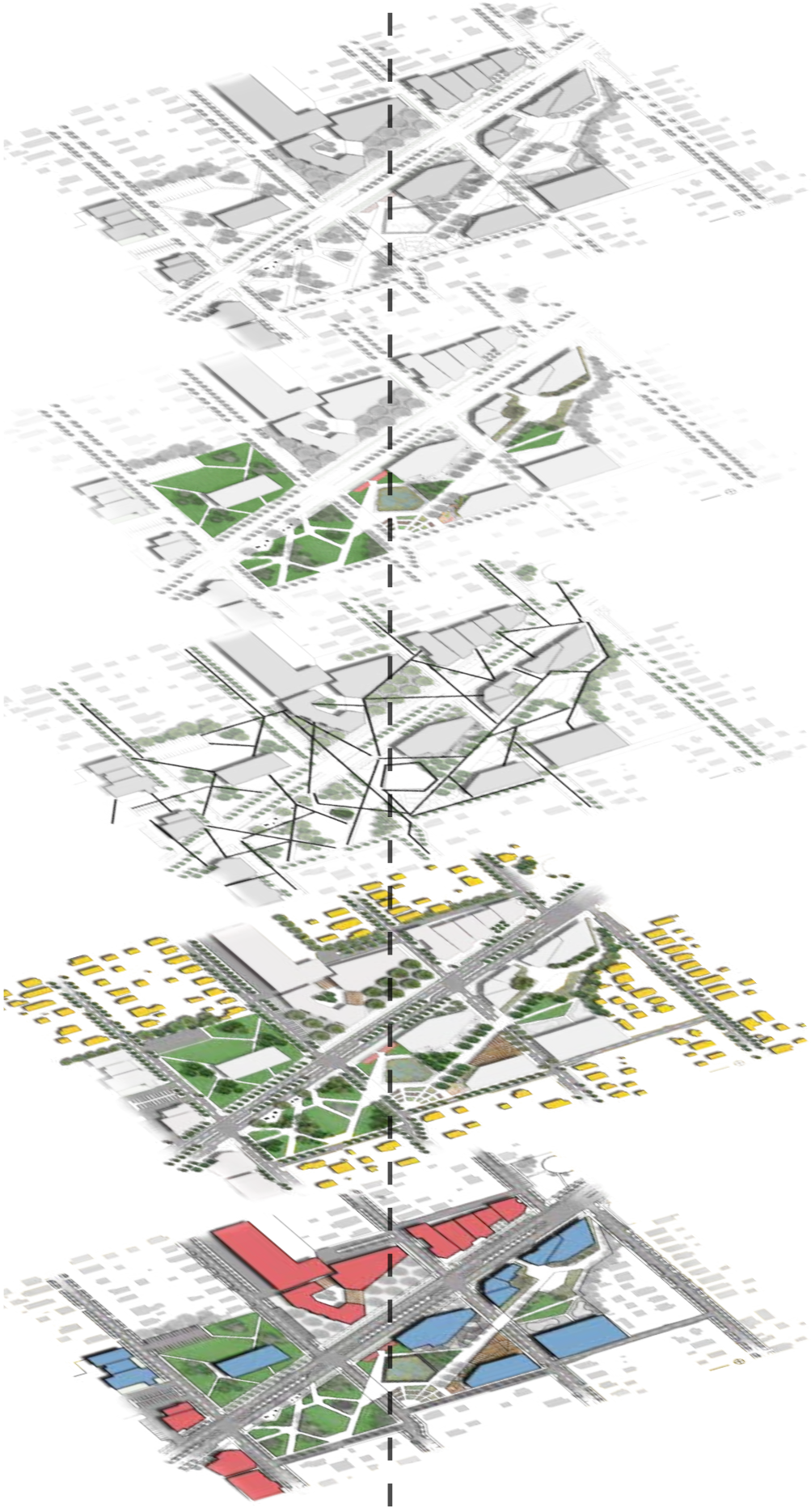


FIGURE 3.9 - IDENTITY

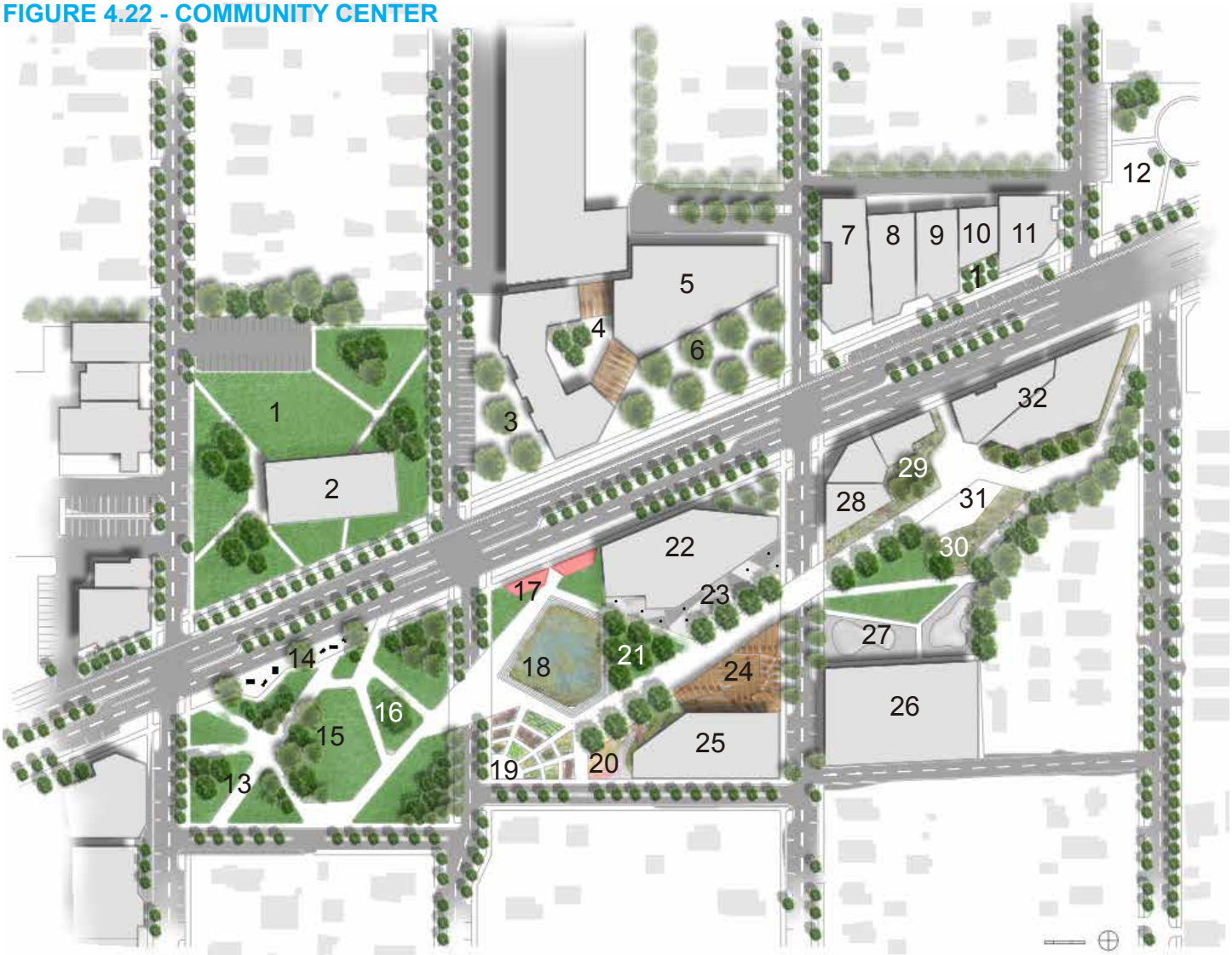
FIGURE 3.10 - OPEN SPACE BENEFITS

FIGURE 4.0 - PEDESTRIAN NETWORK

FIGURE 4.1 - STREETSCAPES

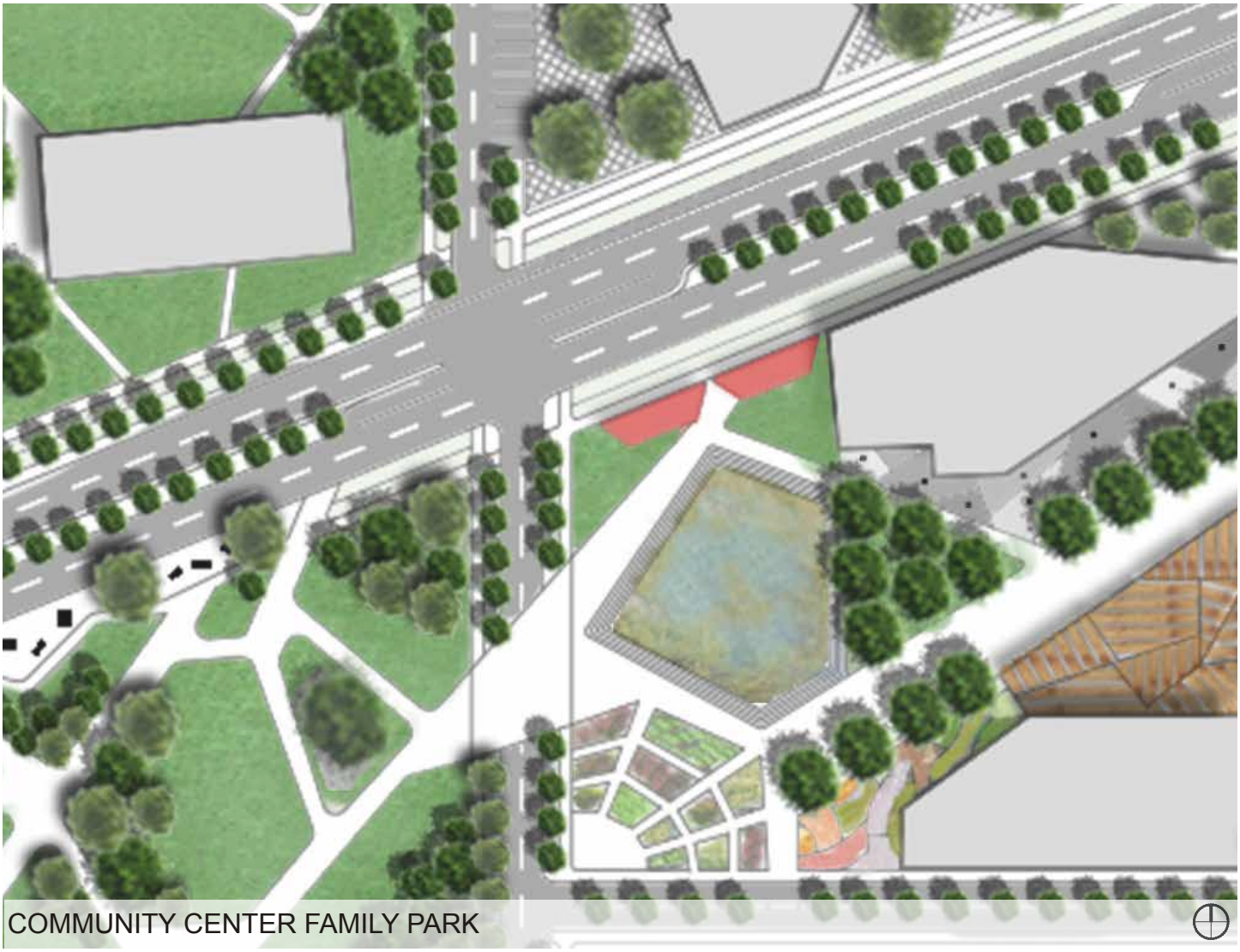
FIGURE 4.2 - SUSTAINABLE DESIGN PRINCIPLES

FIGURE 4.22 - COMMUNITY CENTER



COMMUNITY CENTER - SITE DETAIL MASTER PLAN

1	OPEN SPACE AREA	16	SPLASH PAD	31	PLAYGROUND
2	EXISTING CHURCH	17	BUS STOP	32	COMMUNITY CENTER
3	PLAZA SPACE	18	RETENTION POND		
4	COURTYARD	19	VEGETABLE GARDEN		
5	MOTORCYCLE DEALER	20	HERB GARDEN		
6	MOTORCYCLE PLAZA	21	STORMWATER PLAZA		
7	RESTAURANT	22	LIBRARY		
8	ICE CREAM SHOP	23	LIGHTING PLAZA		
9	BOOKSTORE	24	OUTDOOR SEATING		
10	DELI	25	COMMUNITY KITCHEN		
11	COFFEE SHOPS	26	SPORTS FIELDS		
12	STORM WATER PLAZA	27	SKATE PARK		
13	MOUNDS	28	COMMUNITY ROOMS		
14	FOOD CARTS	29	RAIN GARDEN		
15	OPEN SPACE AREA	30	RAIN GARDEN		



COMMUNITY CENTER FAMILY PARK

DESIGN GUIDELINES: CORRIDOR GUIDELINES

The following design guideline principles are created to direct the West Washington Neighborhood design decisions along the corridor. The design guidelines' intent is to create a cohesive design that will help unify the corridor. Some of the suggested guidelines are preliminary and can be changed if they are approved by the neighborhood. The guidelines also incorporate the current and proposed Indianapolis Regional Pedestrian Plan design principles. Furthermore, they attempt to incorporate new ideas to create the corridor's own character.

Some of these ideas are conceptual and may require a different application for specific site conditions. Changes must also be approved by the neighborhood committee and maintain a similarity with the overall design guidelines. Beyond unifying the corridor's character, the design guidelines are tools that help enhance the transportation, economic and social development, as well as the quality of life for the West Washington Neighborhood residents.

The following set of design principles guides decisions regarding spatial requirements, design characteristics, traffic and parking impacts, street planting suggestions, and accommodations for a range of users.

SIDEWALKS

The following guidelines only address the main grid of proposed pedestrian sidewalks.

- Sidewalks should be clean and well-designed to provide a safe, continuous and obvious route for pedestrians.
- Sidewalks should be a minimum width of six-feet.
- Sidewalks are hard surface paths for pedestrians, and they create a clear and physical separation between roadways, and off-street plazas or open spaces.
- Sidewalks are incorporated into the corridor design and the layout of the roads.
- Sidewalks should utilize the existing right-of-way, but if it is insufficiently wide, developers may require agreements with adjacent owners.
- Entrances, exits and other street intersections should be designed to minimize pedestrian conflict.
- Alley access and service area roadways are located in the interior of the street's block.
- Decorative paving such as stamped concrete with a random pattern is encouraged along the corridor.
- All pedestrian sidewalks should be in compliance with ADA standards and regulations.
- Sidewalks should demarcate the difference between main street sidewalks and secondary sidewalks.
- Pedestrian sidewalks should be clear of obstruction.
- Different desirable microclimates should be encouraged along pedestrian sidewalks.
- Pedestrian sidewalks should be buffered away from vehicles and provide safe pedestrian crossing.
- Pedestrian sidewalks should contribute to the character of the corridor and also the neighborhood.

ON-STREET PARKING

- The preferred width of a parallel on-street parking lane is 8-feet on community center streets, low-volume, and commercial street areas with anticipated high turnover of parking.
- On-street parking on residential areas is only encouraged where less than four driveways face the street within a street block.
- On-street parking should be located based on the characteristics of the street and the needs of the adjacent land uses.
- On-street parking should be primarily parallel parking on higher volume urban arterial streets.
- Where appropriate, metered or time-restricted parking should be used to provide reasonable short-term parking for retail customers and visitors while discouraging long-term parking.

BICYCLE PARKING

- Connect bicycle-parking facilities with the main pedestrian way.
- Provide at least one covered bicycle shelter.
- Where necessary, provide bicycle ramps in conjunction with outdoor stairs to facilitate bicycle movement.
- Bike racks, sculptures or unique bicycle parking elements are appropriate as long as the elements meet the street's character and functional guidelines.

BICYCLE WAY

- Consider traffic-calming strategies and design for appropriate traffic-calming interventions to reduce vehicular speed and increase safety.
- Provide safe and recognizable connections from corridor bicycle facilities to other street types around the neighborhood.
- Ensure safe crossing.
- Periodically swept and maintained bicycle ways for pedestrians' safety.
- Maintained bicycle ways to optimize ridership.
- Use bicycle-safe inlet grates when inlets are located in the bike lane.
- Provide colored marking pavement to the bicycle ways to reduce bicyclist and motorist conflicts at potentialy confusing or dangerous crossing areas.
- Use the color green in pavement or provide signage to clarify the pavement markings at high-conflict areas.

BUILDING FRONTAGE ZONE / FAÇADES

- The frontage zone of the corridor represents the area between the main pedestrian sidewalk and the buildings' property line. This area holds design elements and fixtures that give character and uniqueness to each building along the corridor, but at the same time there is an element that creates cohesiveness.
- The design elements on the buildings' frontage should not interfere with the pedestrian way.
- Exits and entrances should be designed to minimize pedestrian conflicts.
- Items in the frontage zone should be movable or temporary and may change if required.
- Elements and fixtures attached to the face of the building may include awnings, decorative lighting, planting pots, signage, and other store advertisements.
- Some buildings are set back to create outdoor living spaces. These areas generate interest along the corridor and adjacent land uses where walking and social gathering are encouraged. Examples of these zone elements include outdoor cafes, public art, seating areas, plazas, and storm water plazas.

STREET SPEED

Most urban streets are designed to mainly accommodate vehicular circulation. In the case of West Washington Street, speed influences safety, accessibility and the visual experience. The corridor's speed is chosen to create a safe and functional street. The different speeds at which vehicles operate through the corridor accommodate the site's context and achieve different levels of multimodal activity. The following street speed guidelines should be taken into consideration:

- The streets should have an appropriate and realistic speed limit of 35 mph.
- Physical measures such as curb extensions and medians should be used to narrow the traveled way along the community center area.
- Narrower travel lanes along proposed streetscapes will cause motorists to naturally slow down.
- Design elements such as on-street parking will influence the speed of cars.

PAVEMENT TREATMENTS

The paving of sidewalks and plazas along the corridor builds the character of the neighborhood with patterns distinct from other streets.

The following guidelines help identify the requirements for paving along the corridor:

- ADA pavement standards should be applied for vibration-free pathes, slopes, and tactile warning as required by current legislation.
- Pedestrian paved areas create a clear and physical separation between roadways.
- Pavement treatments are incorporated into corridor design and road layout.
- Entrances, exits, and other street intersections are designed to minimize pedestrian conflict.
- Decorative paving such as colored and stamped concrete and random patterned concrete is encouraged along the main sidewalks of the corridor.
- Stamped concrete should be used because it is durable and practical. A random pattern would be beautiful and consistent with the goal of honoring the diverse, interconnecting, and growing population in the area.

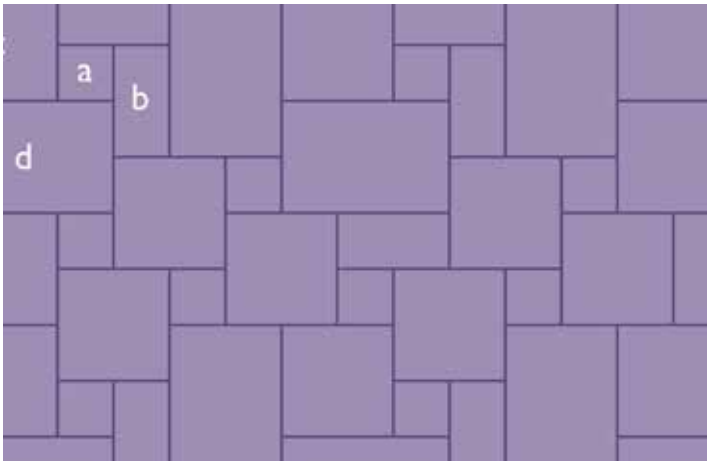


FIGURE 4.7 - STAMPED OPTION

The colored stamped concrete is composed of three different sizes of stamps.

FIGURE 4.8 - STAMPED PATTERN

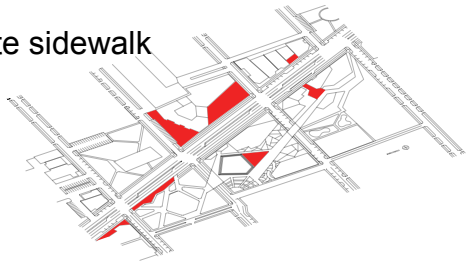
Desirable colored stamped concrete pattern.

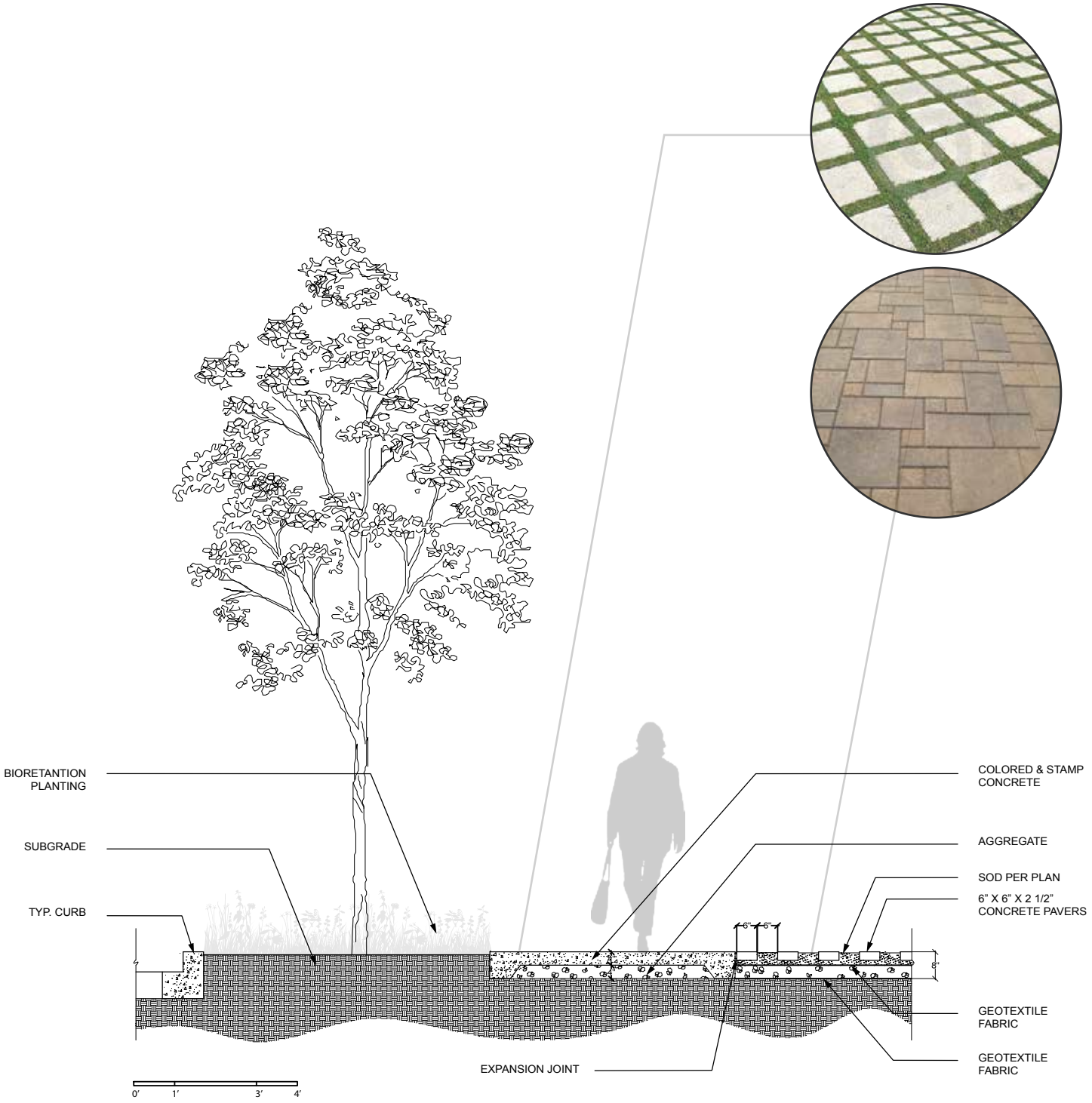
FIGURE 4.6 - EXAMPLE OF HOW THE MAIN SIDEWALK SHOULD LOOK

FIGURE 4.9 - CONCRETE PAVERS

FIGURE 4.10 - COLORED & STAMPED CONCRETE DETAIL

The image below shows an area where the colored stamped concrete sidewalk transitions into a lawn area with concrete pavers.





PEDESTRIAN CROSSING

The cross-zone represents the area where pedestrians and other non-motorized users interface with motorized transportation zones. Most pedestrian crossing zones should be located at street corners and under certain conditions at mid-blocks. The crossing areas purposely affect the speed of travel through an intersection. Good visibility and safety are critical for all users of the corridor.

- Utilize special paving at crossing to highlight an important street or pedestrian connection.
- Incorporate public art may be incorporated into the surface design. For example, the surface design should be a weaving basket design.
- Provide countdown crosswalk signals.
- Provide crosswalks at locations where crossing demand is high (retail areas, parks, transit stops, schools, etc.)
- Place refuge areas along the vegetated median where pedestrians can cross segments of the street safely.

FIGURE 5.0 - WEAVING BASKET PAVING AT PEDESTRIAN CROSSINGS ZONES

STREET FURNITURE

Elements such as street furniture (lighting, benches, etc.) provide many benefits for a complete street. The furniture provides a buffer between the sidewalk and adjacent motor vehicle travel lanes. Most importantly it activates the streets, and it creates visually pleasing and comfortable image.

- The street furniture of the corridor should become pedestrian icons. It should be a recognizable type that is repeated at every corner. (Art elements in the corridor).
- Furniture elements function as a sign but are a distinctive and identifiable element.
- Benches, bike racks, waste receptacles, and informational signage should be simple and functional.
- Benches should be comfortable places to rest and enjoy the “Green Street Corridor”.
- A variety of seating locations should accommodate the needs of various users and abilities.

FIGURE 5.2 - TYPICAL BENCH

This bench is located along the main corridor.

FIGURE 5.3 - ICONIC BENCHES

This artistic bench will be located at plazas, courtyards and at intersections.

FIGURE 5.1 - BENCHES

This type of bench can incorporated vegetation and can be placed at curb extensions.

FIGURE 5.4 - LEARNING PLAZA BENCH

The learning plaza can incorporate this type of bench and make the place more interactive.

BUS SHELTERS

- Have a strong physical presence, which is visible to bicyclists, drivers and pedestrians.
- Be located at significant pedestrian generators.
- Be locate at within the separation zone between sidewalks to maintain pedestrian circulation
- Meet all ADA standards for bus shelter placement.
- Designed to minimize road spray and noise and to keep pedestrians safe in case of an automobile impact.

FIGURE 5.6 - INSPIRATIONAL BUS SHELTER

Bus stops should also become pieces of art along the corridor rather than the typical steel box.

LIGHTING

Street lighting can reduce the risk of car crashes but also increase safety at night. The corridor's should be for both pedestrians and motorists. Complete street lighting should:

- Illuminate the main pedestrian sidewalk at intersections.
- Pedestrian-scaled decorative lighting should be placed appropriately.
- Carefully coordinate with landscaping design to ensure its effectiveness.
- Be installed at all street intersections.
- Add an exciting dimension to the corridor's image.
- Be both functional and aesthetically pleasing.
- Be installed on residential streets and in areas of high pedestrian or bicycle activity (such as schools, parks, transit stops and community centers, commercial and recreational facilities).

FIGURE 5.7 - STREET LIGHTING

Lighting posts are visually pleasant and add character to the street.

PLANTING PALETTE

Planting strips and other planting areas should.

- Utilize naturalistic native plants that emulate a calming, inviting, and safe landscape.
- Provide habitats for small wildlife species.
- Express the corridor's continuity and linearity through regular plantings of tall trees, shrubs, grasses, flowers, and groundcovers.
- Provide a comfortable human experience by planting large shade trees in all locations possible within the standards.

KEY	APPLICATION	BOTANICAL NAME	COMMON NAME
Trees		Acer campestre	Hedge Maple
	Overstiry Trees	Acer saccharum	Sugar Maple
	Overstiry Trees	Acer rubrum	Red Maple
	Overstiry Trees	Cladastris kentukea	Yellowwood
	Overstiry Trees	Ginko biloba (male only)	Ginko
	Overstiry Trees	Liriodendron tulipifera	Tulip Tree
	Overstiry Trees	Quercus bicolor	Swamp White Oak
	Overstiry Trees	Quercus rubra	Red Oak
	Overstiry Trees	Taxodium distichum	Bald Cypress
Trees			
	Low street trees	Carpinus caroliniana	American Hornbeam
	Low street trees	Cercis canadensis	Redbud
	Low street trees	Crataegus phaenopyrum	Washington Hawthorn
	Low street trees	Crataegus viridis	Green Hawthorn
	Low street trees		
Evergreen Trees			
	Buffer areas / residential	Abies concolor	White Fir
	Buffer areas / residential	Pseudostuga menziesii	Douglas Fir
	Buffer areas / residential	Picea pungens	Colorado Green Spruce
	Buffer areas / residential	Keteleeri Juniper	Juniperus chinensis
Shrubs			
	Medians / Parks / Plazas	Ilex Verticillata	Winterberry
	Medians / Parks / Plazas	Rosa 'Razzmatazz'	Knowckout Rose
	Medians / Parks / Plazas	Viburnum Carlesii	Koreanspice Viburnum
	Medians / Parks / Plazas	Viburnum dentatum	Arrowwood Viburnum
Perennial			
	Planters / Median / Parks	Lilium Regale	Regal Lily
	Planters / Median / Parks	Hemerocallis 'Apricot Beauty'	Daylily
	Planters / Median / Parks	Hosta 'So Sweet'	Hosta
	Planters / Median / Parks	Geranium 'Gerwat' Rozanne	Cranesbill
	Planters / Median / Parks	Campanula cochleariifolia 'Bavaria Blue'	Barvaria Blue Dwarf Bellflower
	Planters / Median / Parks	Campanula 'Samantha'	Samantha Bellflower
	Planters / Median / Parks	Kalimeris incisa 'Blue Star'	Kalimeris
	Planters / Median / Parks	Hepatica americana	Round lobel hepatica

Ornamental Grasses			
	Residentail / Open areas	Calamagrostis acutiflora	Fether Reed Grass
	Residentail / Open areas	Panicum Virgatum	Switchgrass
	Residentail / Open areas	Stipa gigantea	Giant feather grass
	Residentail / Open areas	Chasmanthium latifolium	Northern Sea Oats
	Residentail / Open areas	Elymus Canadensis	Canada Wild Rye
	Residentail / Open areas	Schizachyrium scoparium	Little Bluestem

FIGURE 5.8 - SUGGESTED TREES, SHRUBS, AND ORNAMENTAL PLANTS

The city's suggested planting list influenced the planting palette of the corridor.

FIGURE 5.8 - COMMUNITY GARDEN

The herb and vegetable garden adjacent to the community kitchen has a flexible planting palette that can be changed every season.

Herb	Application	Botanical Name	Common Name
	*P *RB *RG *CC	Alchemilla vulgaris	Lady's Mantle
	*P *RB *RG *CC	Allium tuberosum	Garlic Chives
	*P *RB *RG *CC	Artemisia shmidtiana 'Silver Mound'	Silver Mound Artemisia
	*P *RB *RG *CC	Coriandrum sativum	Coriander (cilantro)
	*P *RB *RG *CC	Galium odoratum	Sweet woodruff
	*P *RB *RG *CC	Laurus nobilis	Bay Laurel
	*P *RB *RG *CC	Melissa officinalis	Lemon Balm
	*P *RB *RG *CC	Mentha x piperita	Peppermint
	*P *RB *RG *CC	Ocimum basilicum	Basil
	*P *RB *RG *CC	Organum majorana	Sweet marjorana
	*P *RB *RG *CC	Origanum vulgare	Oregano
	*P *RB *RG *CC	Petroselium crispum	Curly Parsley
	*P *RB *RG *CC	Stachys byzantia	Lamb's Ear

FIGURE 5.9 - SUGGESTED HERB GARDEN PLANTS

Vegetables	Application	Name
*Recomented	*R *VG * CC * RB	Zucchini
but not required	*R *VG * CC * RB	Tomatos
	*R *VG * CC * RB	Lettuce
	*R *VG * CC * RB	Onnions
	*R *VG * CC * RB	Cucumber
	*R *VG * CC * RB	Pepper
	*R *VG * CC * RB	Verbena
	*R *VG * CC * RB	Carrots
	*R *VG * CC * RB	Strawberry
	*R *VG * CC * RB	Carrots
	*R *VG * CC * RB	Cabbages
	*R *VG * CC * RB	Sweet corn
	*R *VG * CC * RB	Beans
	*R *VG * CC * RB	Catmint
	*R *VG * CC * RB	Artickoke

FIGURE 5.10 - SUGGESTED VEGETABLE PLANTS

CURB EXTENSIONS / BIORETENTION SWALE

A combination of trees, shrubs, ground cover, lawn, and other appropriate treatments should be planted in the separation zones or curb extensions. Curb extensions will help retain and treat water runoff. Additionally, some curb extensions can be public space and enable placement of street furniture such as benches or other elements. The curb extensions also allow for vegetation that attracts birds, butterflies, and other small creatures.

FIGURE 6.0 - BIORETENTION AREA WITH WET MESIC COMMUNITY PLANTING

FIGURE 6.1 - BIORETENTION AREA WITH SEDGE MEADOW COMMUNITIES

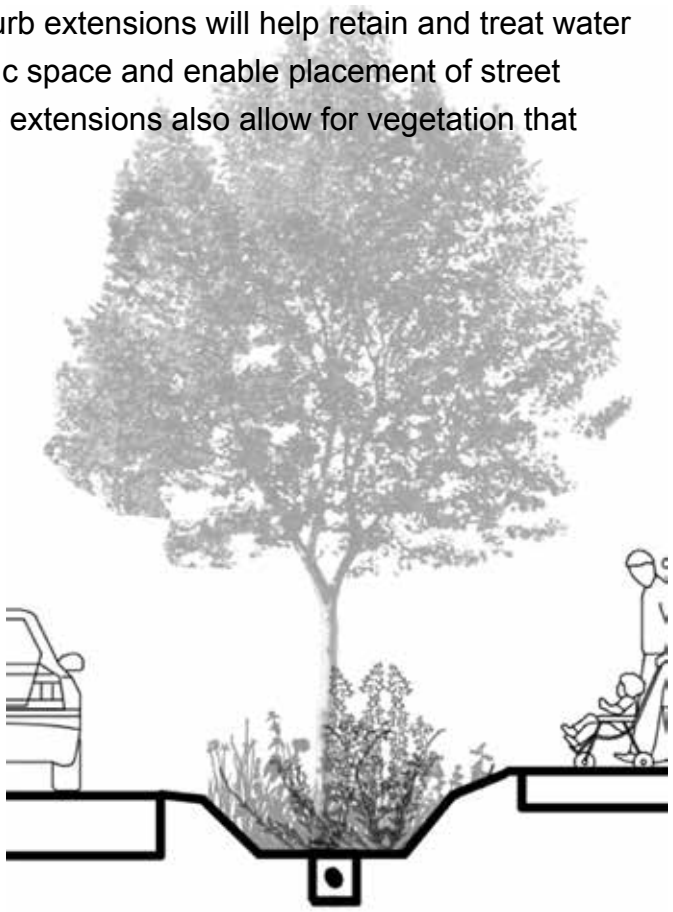


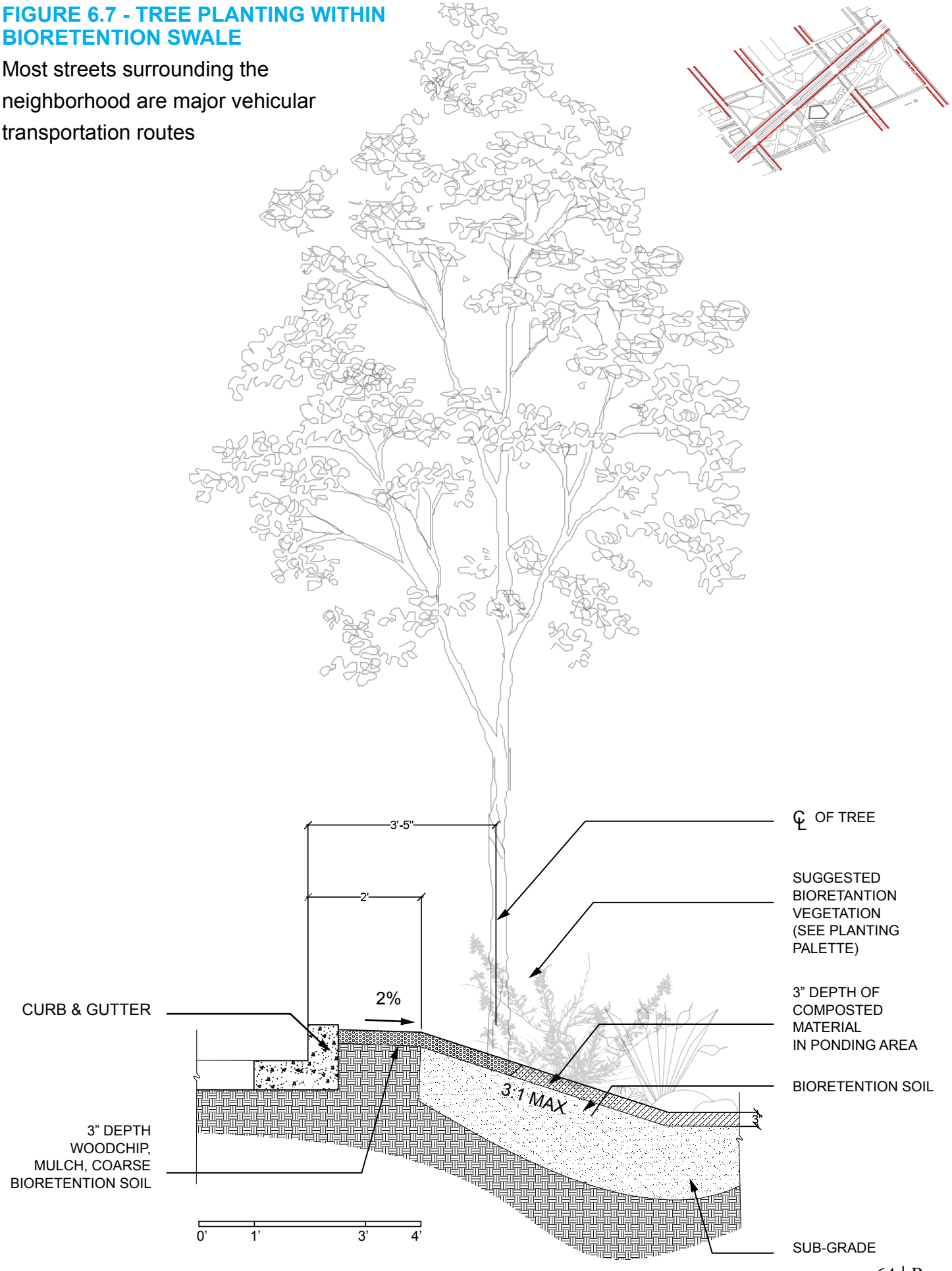
FIGURE 6.3 - BIORETENTION AREA ALONG QUIET STREET

Bioretention Area	APPLICATION	BOTANICAL NAME	COMMON NAME
	Sedge Meadow Comm.		
		Veronicastrum virginicum	Culvers Root
		Scirpus pendulus	Reddish Bulrush
		Senecio areus	Golden Ragwort
		Schizachyrium scoparium	Little Bluestem
		Eupatorium maculatum	Spotted Joe-Pye Weed
		Deschampsia caespitosa	Tufted Hair Grass
		Lobelia cardinalis	Cardnial Flower
	Wet Mesic Communities		
		Carex frankii	Franks Sedge
		Bromus latiglumus	Tall Brome
		Actinomeris alternifolia	Wingstem
		Solidago flexicaulis	Solidago flexicaulis
		Aster lateriflorus	Side-Flowering Aster
		Liatris spicata	Dense Blazing Star
		Panicum virgatum	Switch Grass
		Echinacea purpurea	Purple Coneflower
		Sporobolus heterolepis	Prairie Dropseed

FIGURE 6.2 - SUGGESTED TREES, SHRUBS, AND ORNAMENTAL PLANTS

FIGURE 6.7 - TREE PLANTING WITHIN BIORETENTION SWALE

Most streets surrounding the neighborhood are major vehicular transportation routes



Rain Gardens		
*Bird & Butterfly RG.	*R *P * CC *	New England Aste
	*R *P * CC *	Switchgrass
	*R *P * CC *	Snowy Black-Eyed Susan
	*R *P * CC *	Golden Alexander
	*R *P * CC *	Purple Coneflower
	*R *P * CC *	Blue Flag iris
	*R *P * CC *	Dense Blazing Star
	*R *P * CC *	Smoot Aster
	*R *P * CC *	Mountain Mint
	*R *P * CC *	Yellow Fox Sedge
	*R *P * CC *	Prairie Dropseed
	*R *P * CC *	Smoth Penstemon
	*R *P * CC *	Cardinal Flower
	*R *P * CC *	Prairie Dropseed

FIGURE 6.8 - SUGGESTED PLANTS FOR BIRDS & BUTTERFLY RAIN GARDENS

Rain Gardens		
*Partial Shade garden	*R *P * CC *	Bottle Gentian
	*R *P * CC *	Sneezeweed
	*R *P * CC *	Burr Sedge
	*R *P * CC *	Golden Alexander
	*R *P * CC *	Wrinkled Goldenrod
	*R *P * CC *	Blue Flag Iris
	*R *P * CC *	Foxglove Penstemon
	*R *P * CC *	Monkey Flower
	*R *P * CC *	Culver's Root
	*R *P * CC *	Cardinal Flower
	*R *P * CC *	Brome Hummock Sedge
	*R *P * CC *	Smoth Penstemon
	*R *P * CC *	Golden Ragwort
	*R *P * CC *	Palm Sedge

FIGURE 6.9 - SUGGESTED PLANTS FOR PARTIAL SHADE RAIN GARDENS

STREET SIGNAGE:

Typically, street signage is not considered an element of the street design, but in West Washington Street the signage will help inform and educate pedestrians. Business signage and other advertisement should be kept at minimum, and the designs are encouraged to be in both English and Spanish.

VISUAL EXCELLENCE:

The design quality of a place influences the experience of pedestrians and is essential for maintaining an attractive and functional environment. The overall visual and physical appearance of the corridor is fundamental to its livability. Any design element or design change should:

- Consider long-term site maintenance.
- Minimize exposure to hazards and provide a safe environment.
- Try to create human sensory experience.
- Provide desirable and functional activities.
- Provide physical comfort.
- Keep sidewalks, alleys, and storefronts free of litter.

ACCESSIBILITY:

General design considerations are required to meet pedestrians' safety, comfort and accessibility. The corridor's design elements should accommodate the needs for a broad range of users, including youth, adults, elderly, and disabled pedestrians. It is also important to provide adequate access for emergency response vehicles. The proposed design accommodates the Americans with Disabilities Act (ADA) standards, as well as local standards.

CORRIDOR GEOMETRIES: STREET TYPOLOGIES

The designs of good streets begin by understanding the street's context. One goal of the design was to establish a good pedestrian network throughout the neighborhood and the surroundings. The proposed street design improvements identified different street types and designed features appropriate to it. A multi-modal street would allowe a more successful and functional corridor.

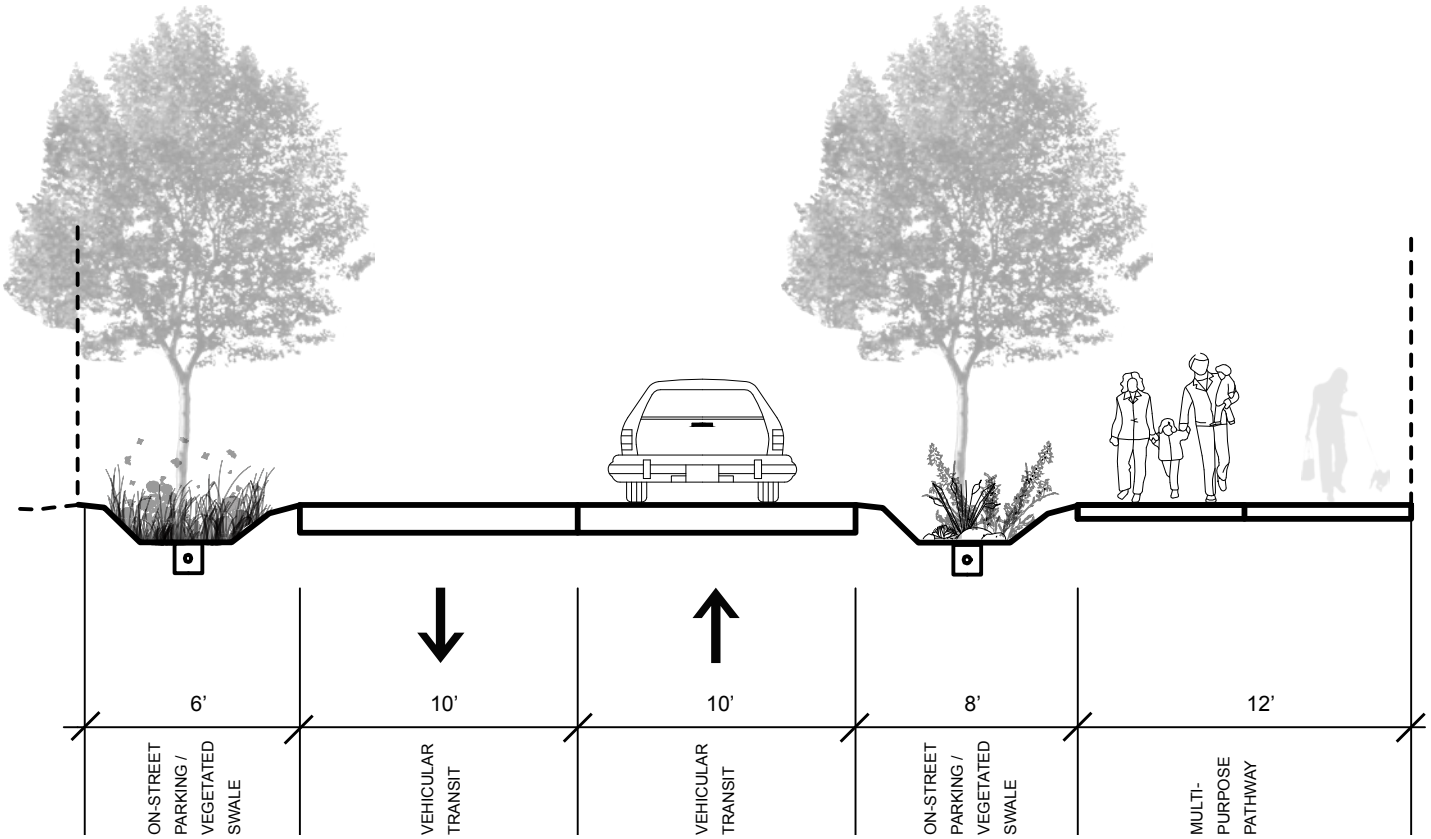


FIGURE 7.0 - STREETSCAPE TYPE I: NEIGHBORHOOD CONNECTOR

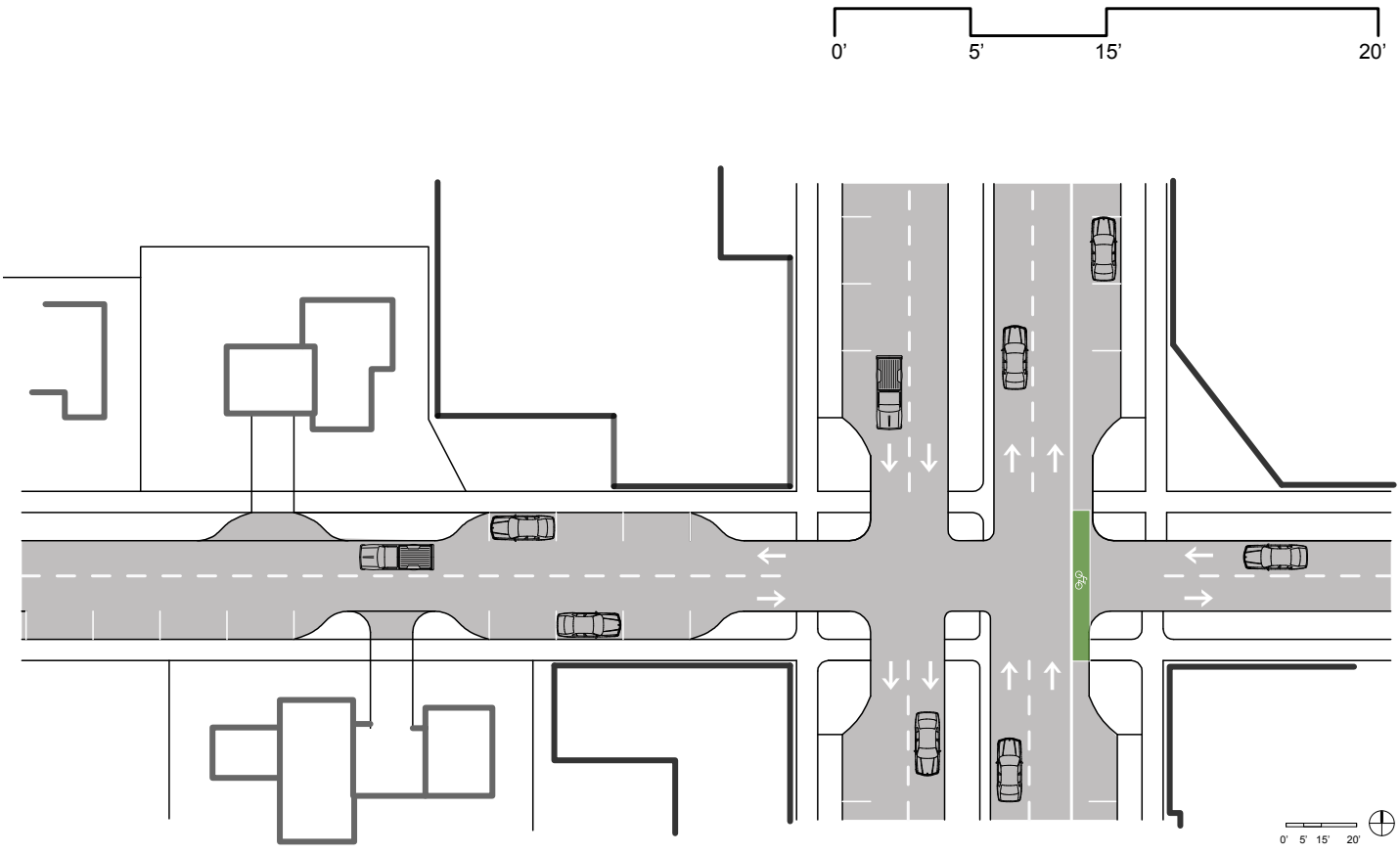


FIGURE 7.1 - COMMUTER CORRIDOR TYPE I: COMMUNITY CENTER

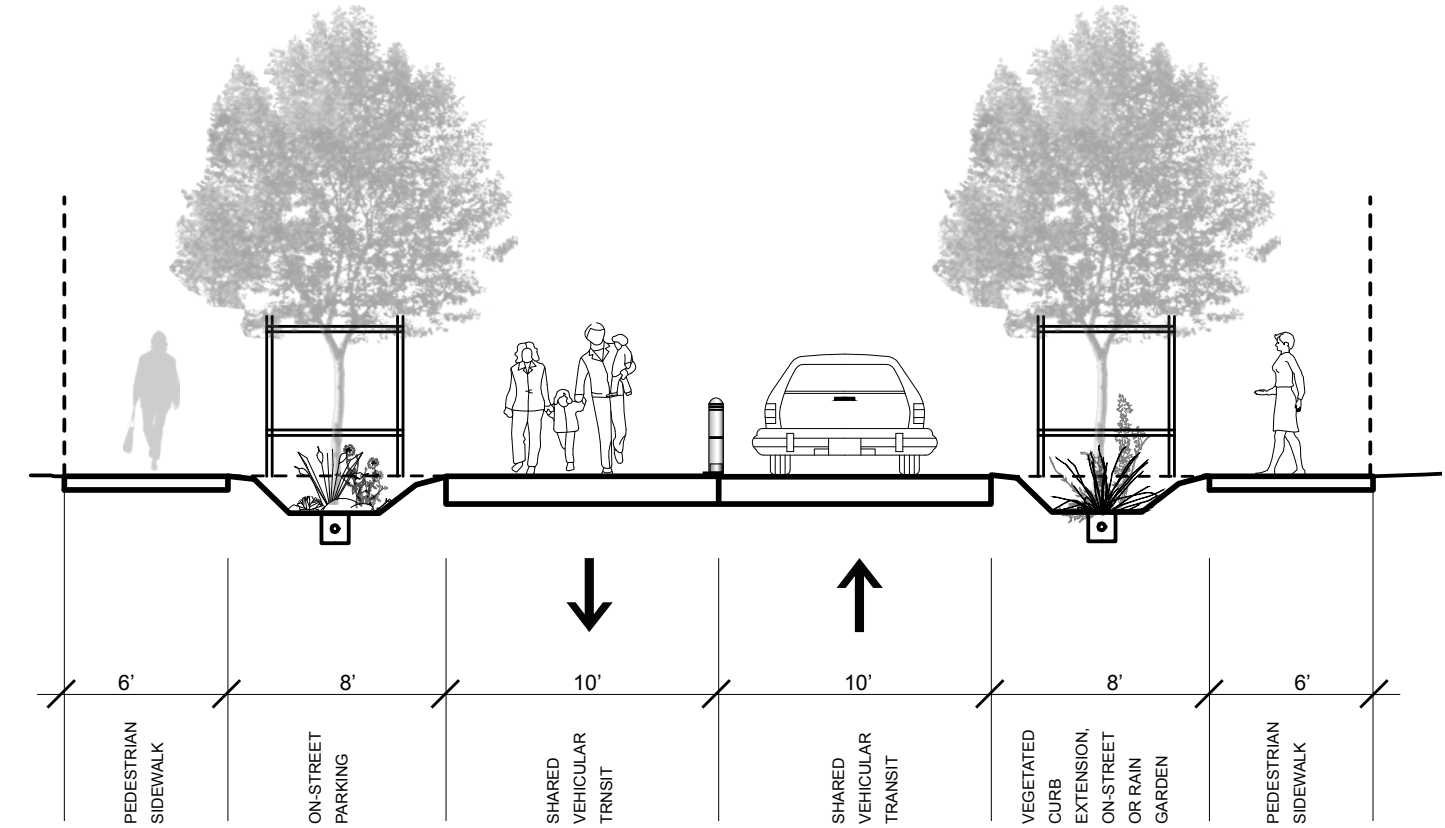
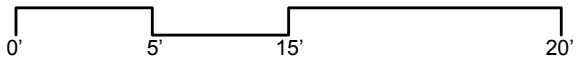


FIGURE 7.2 - STREETSCAPE TYPE I: QUIET STREET AT INTERSECTION



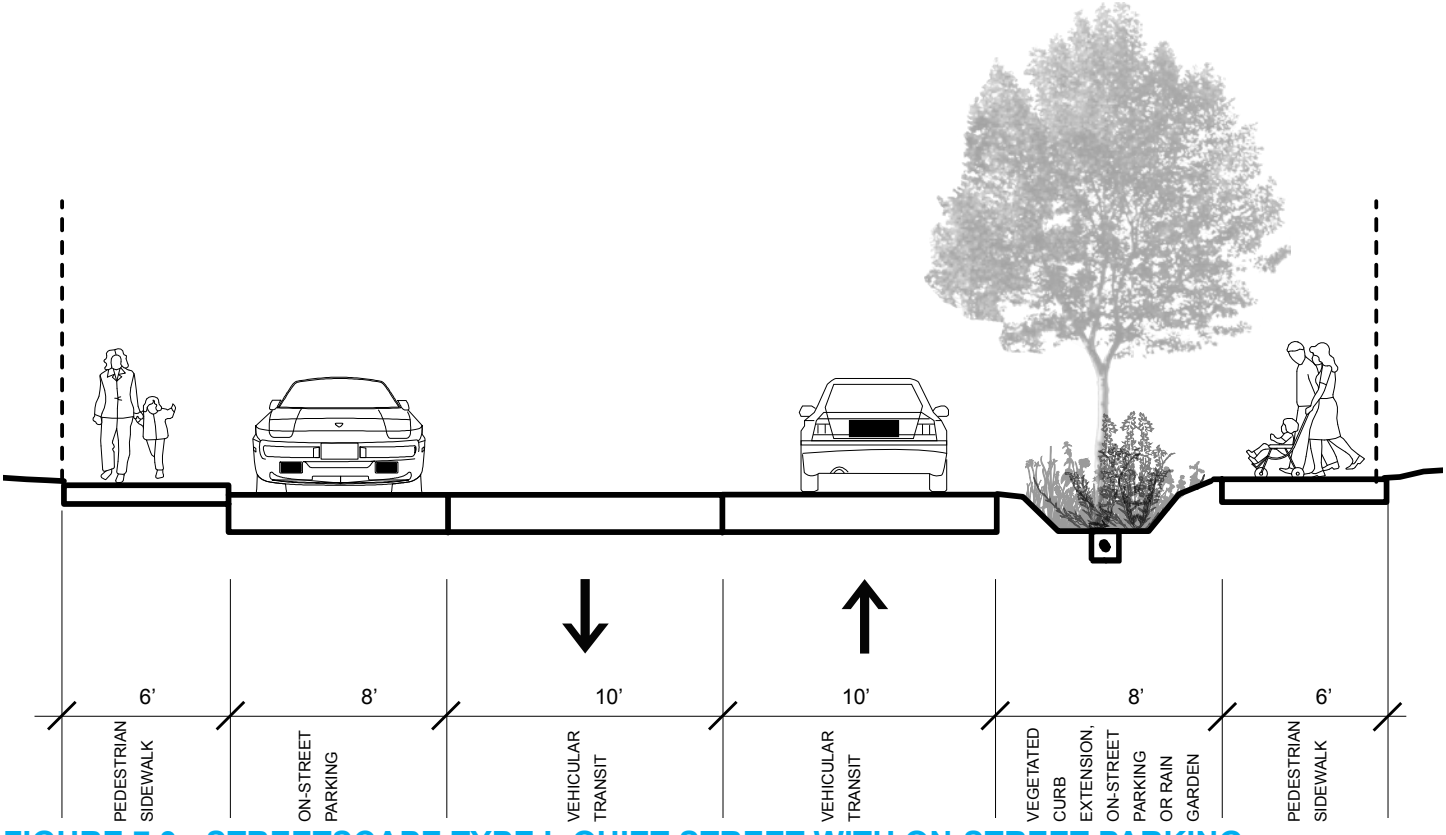
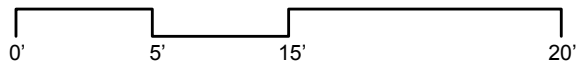


FIGURE 7.3 - STREETSCAPE TYPE I: QUIET STREET WITH ON-STREET PARKING



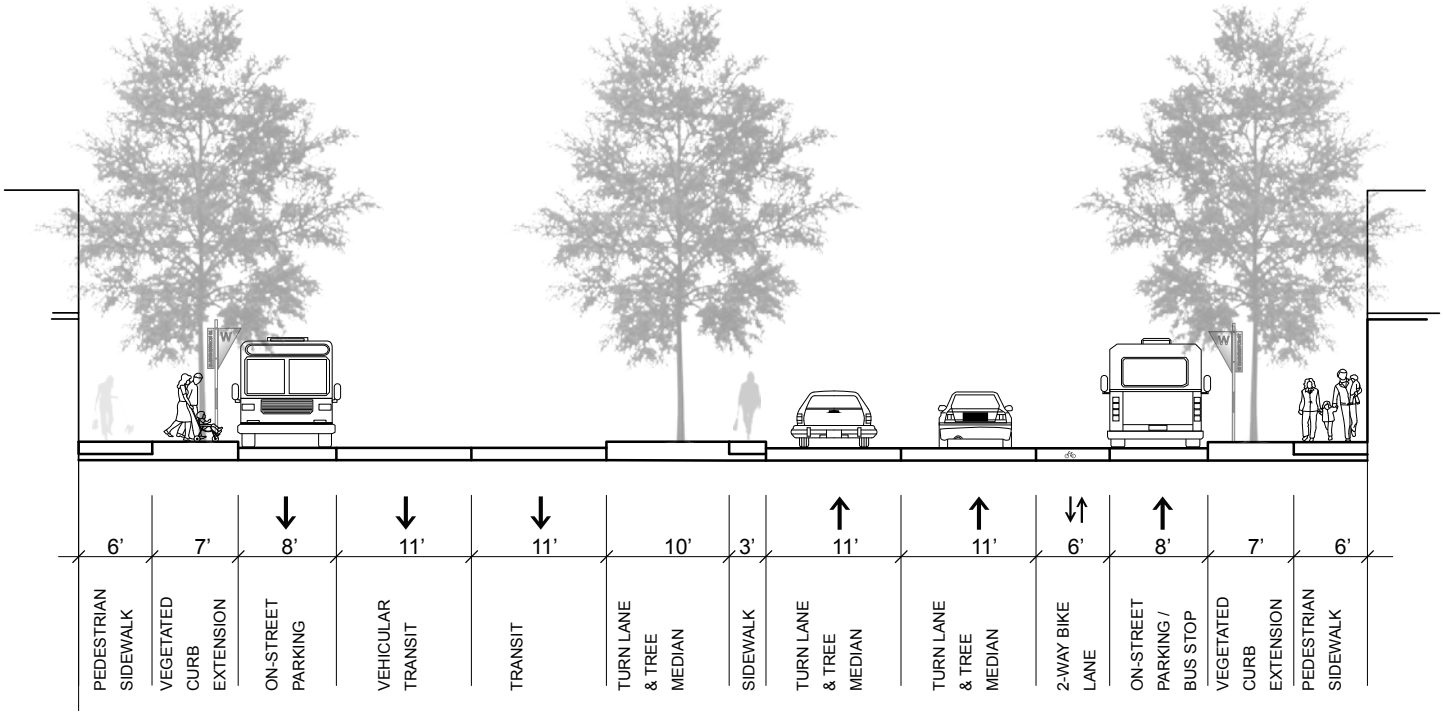


FIGURE 7.4 - COMMUTER CORRIDOR TYPE I: COMMUNITY CENTER

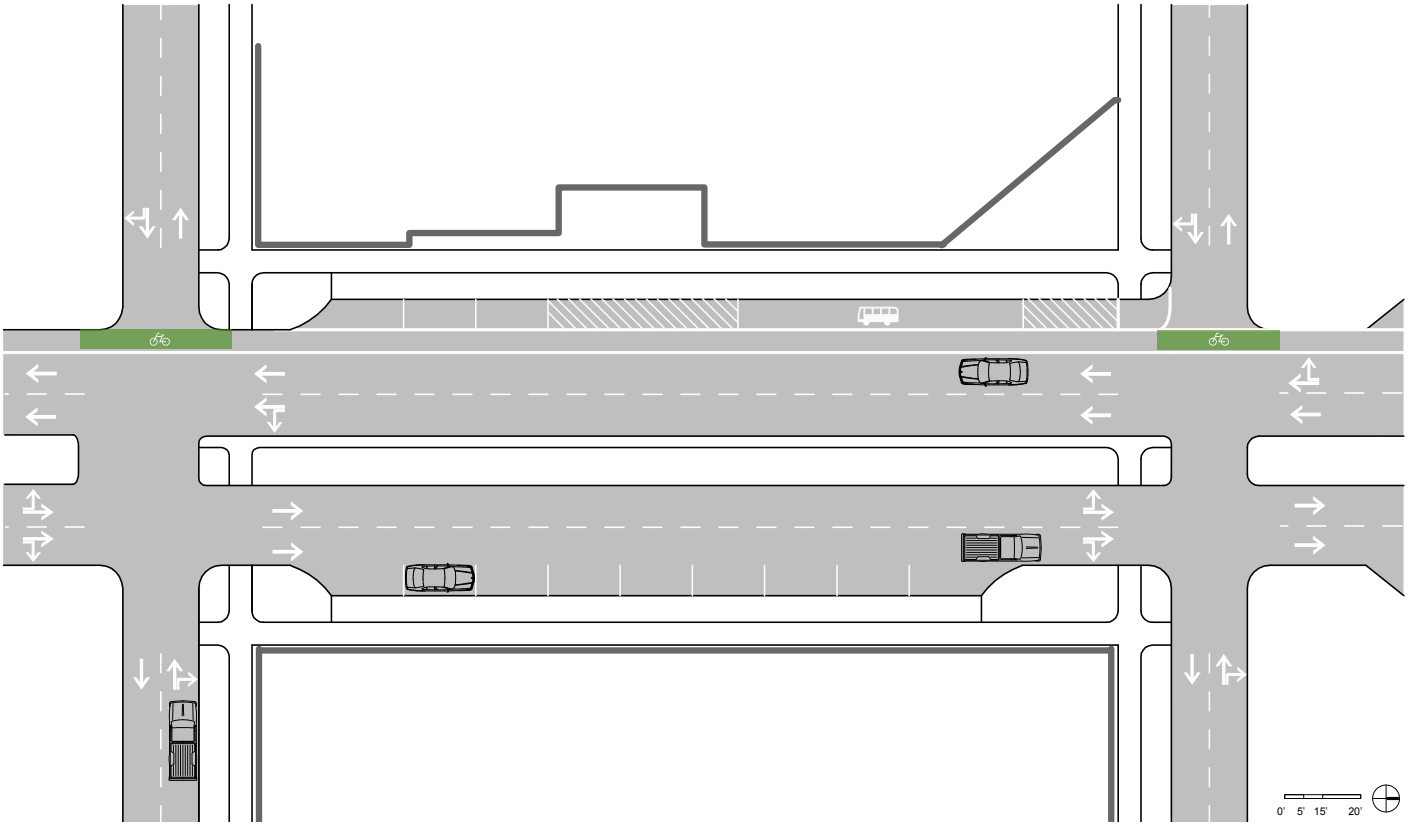


FIGURE 7.4 - COMMUTER CORRIDOR TYPE II: COMMERCIAL CENTER

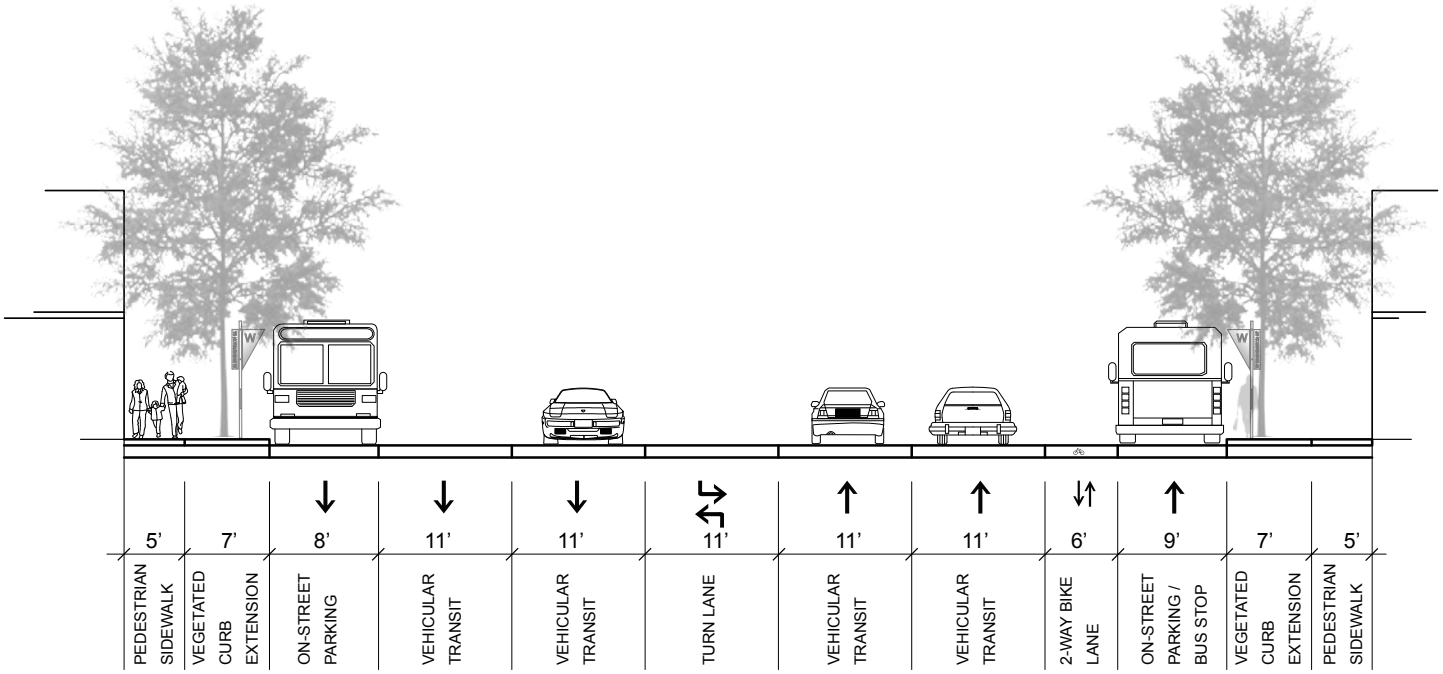


FIGURE 7.5 - COMMUTER CORRIDOR TYPE II: COMMERCIAL CENTER

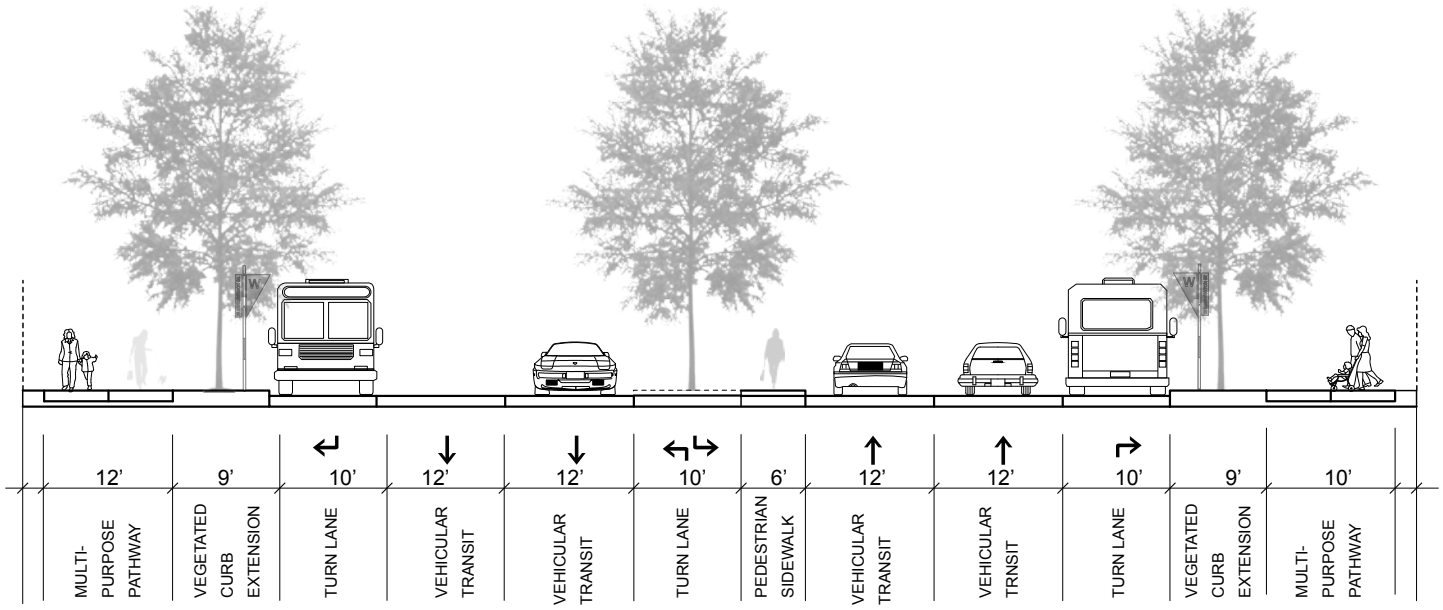


FIGURE 7.6 - COMMUTER CORRIDOR TYPE III- GREENWAY CONNECTOR

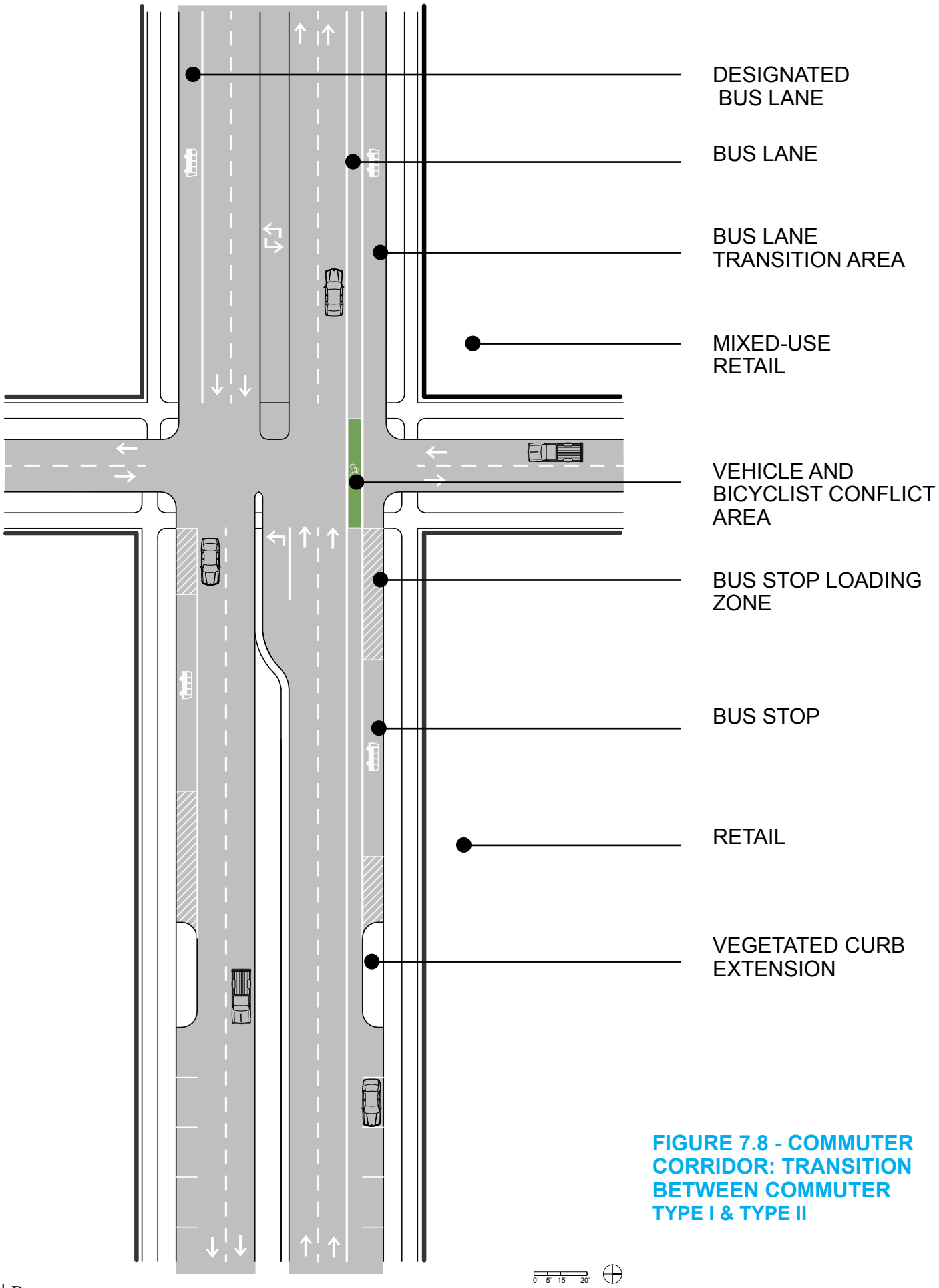


FIGURE 7.8 - COMMUTER CORRIDOR: TRANSITION BETWEEN COMMUTER TYPE I & TYPE II

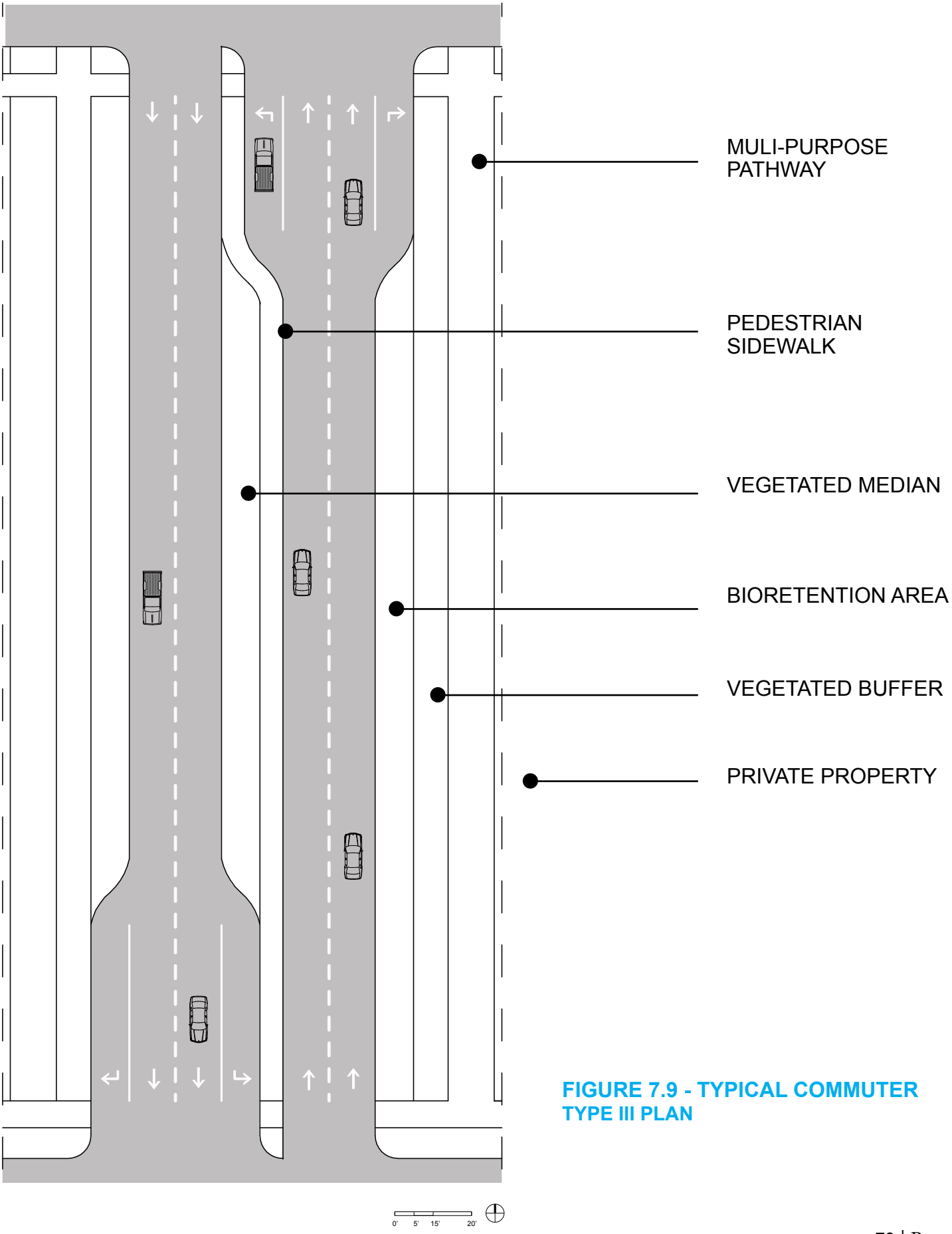
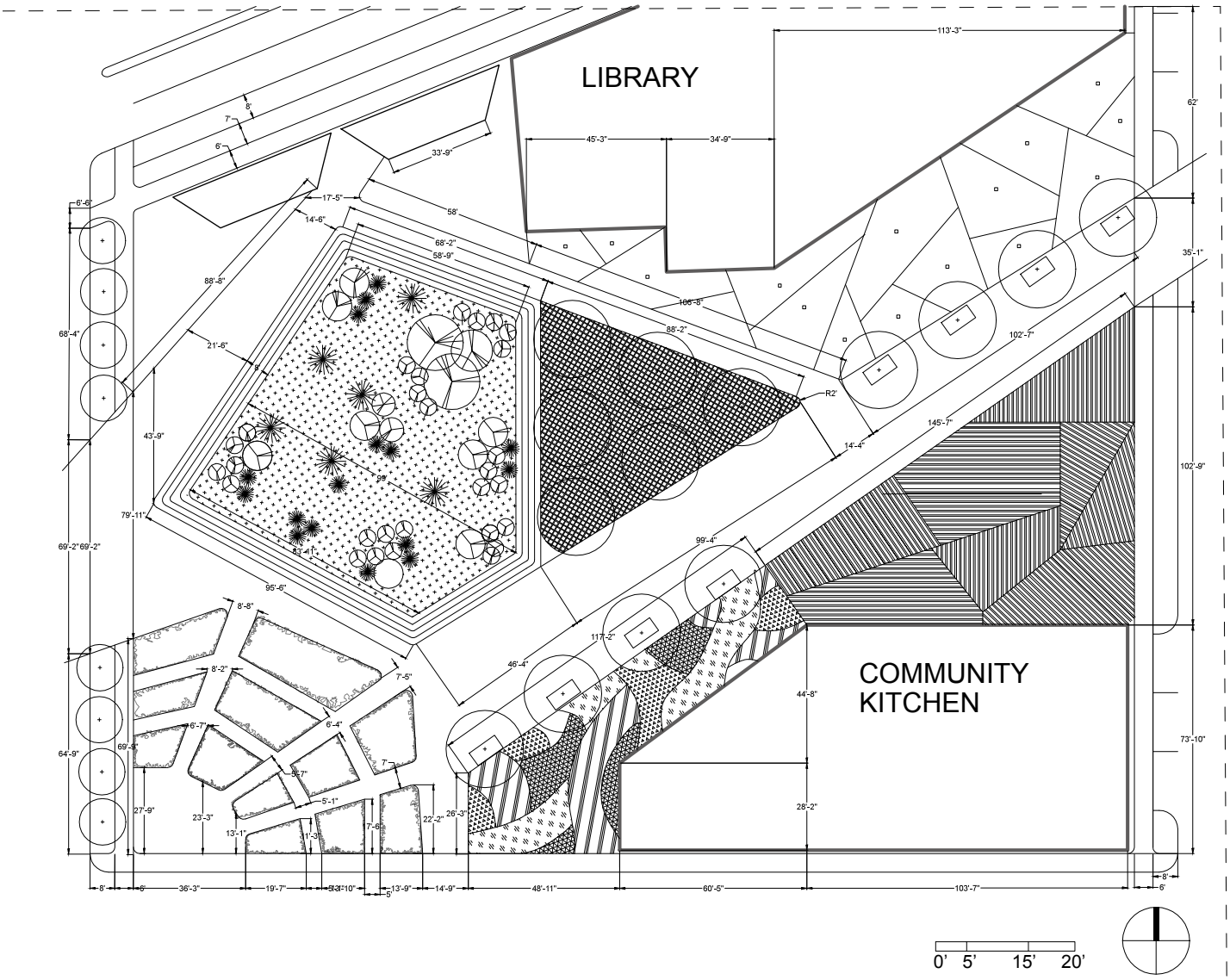
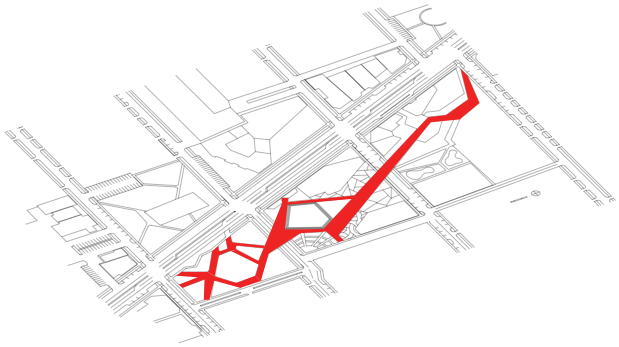


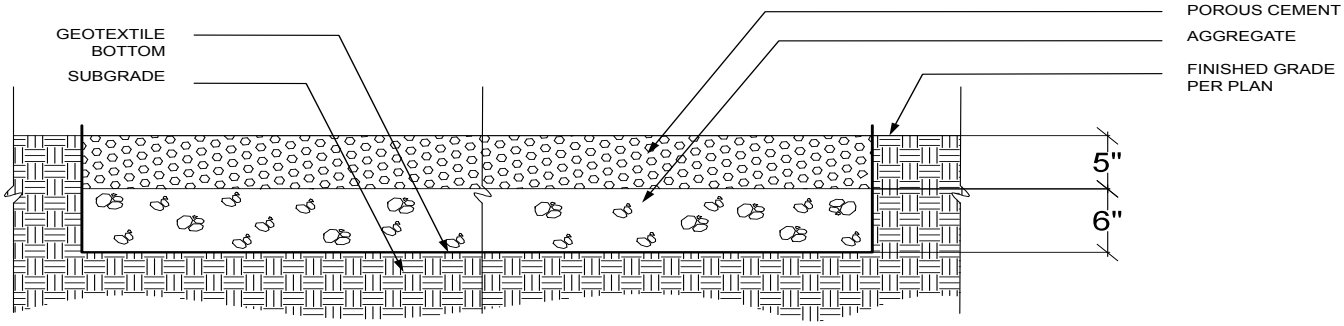
FIGURE 7.9 - TYPICAL COMMUTER TYPE III PLAN

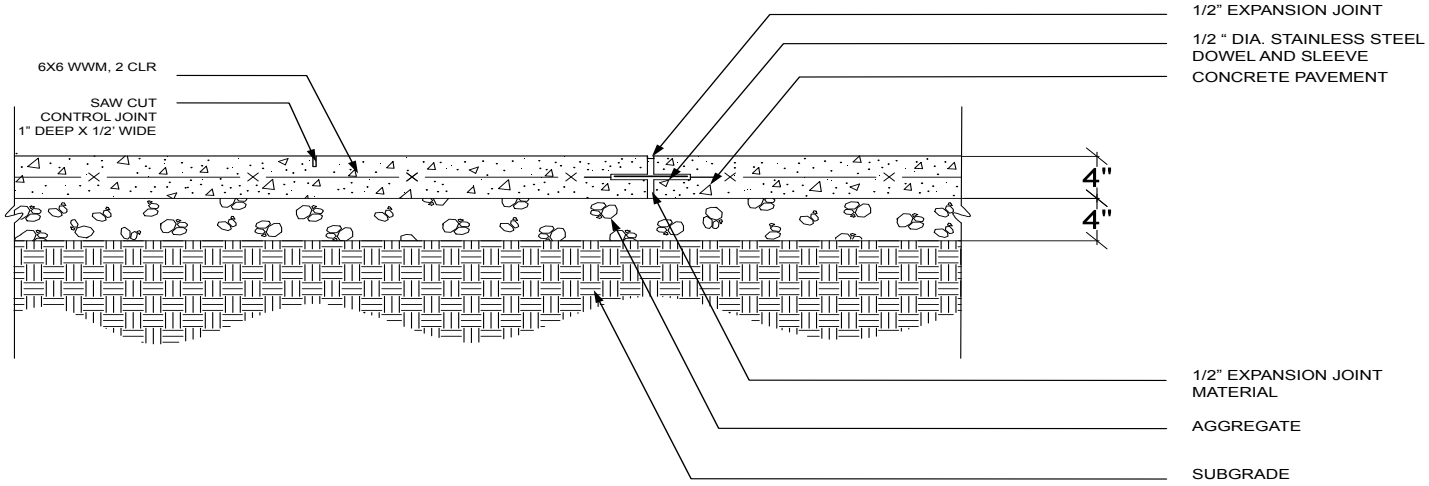


CONSTRUCTION DOCUMENTATION: LEARNING PLAZA

CONSTRUCTION DOCUMENTATION: PAVING DETAILS







CONCLUSION

The renewal of West Washington Street only represents a concept that highlights many levels of possible improvements. In summary, the project knows that is important to create well-designed green corridors that can achieve environmental performance, open-space benefits, and wellness lifestyle support, while also hosting design elements that reflect and honor the neighborhood's unique culture and diversity. Also, a safe network of pedestrian and bike paths can increase the environmental, social, and health benefits for the community. Using sustainable design principles can educate and increase the community's wellbeing. Streetscapes and pedestrian infrastructure can contribute to the community's social and cultural dynamics.

Is understood that many of the suggestions could be incorporated in a short period of time and others could be incorporated later. The review of surveys and conversations with community members, indicate that changes in the corridor should occur soon. One of the best outcomes from this design study will be to start a conversation about possible developments in the West Washington Street neighborhood. Finally, the West Washington Street renewal can become a showcase for nearby neighborhoods and influence the economical, cultural, and social capital of visitors and residents.

APPENDICES

APPENDIX A: SITE SUMMARY

The project site is located approximately four miles west of downtown Indianapolis. Home to a abundant assets, West Washington Street is one of the major east-west streets in the city. A portion of the street is part of the National Road for almost all of its length, and it is one of the few streets that completely cross the city from east to west. Originally, the street was designed as U.S. Route 40 but later was re-aligned due to the construction of I-465. Now, the street stretches from east to west and represents a major access point into downtown for residents living on the far east and west sides of Indianapolis.

FIGURE 8.0 - WEST WASHINGTON STREET

The proposed design project site represents the area along West Washington Street with South Lyndhurst Drive as the west border and South Tibbs Avenue as the eastern boundary. The site is approximately eleven city blocks or 152 acres. Figure 8.0 above outlines the project site.

The neighborhood is a racially diverse community, but in recent years Latino residents have become the newest wave of immigrants. The contextual elements surrounding the project site include: small commercial uses such as an animal hospital, attorney offices, a local newspaper, automobile dealerships and repair shops, grocery stores, a drive-in movie theater, restaurants, gas stations, and other small businesses.

Continuing east of site, Washington Street passes by the Indianapolis Zoo, crosses the White River, and goes by the White River State Park, Indiana State Museum, the Eiteliong Museum, Victory Field, and the Indianapolis Convention Center. Just 3 miles north of the site is the Indianapolis Motor Speedway, and the Indianapolis International Airport is 9 miles west of the site.

APPENDIX B: SURVEY QUESTIONS

COMMUNITY LEADERS INTERVIEW

(People who work for local or neighborhood organizations and have some knowledge of the site)

Question #1 –What do the residents of the West Washington Street neighborhood need in order to have healthier life styles?

Question#2 – What type of development do you envision in the area? And how can it benefit the quality of life for the residents?

- ☐ Retail Development
- ☐ Housing Development
- ☐ Senior Housing Development
- ☐ Other: _____

Question #3 –What activities around the neighborhood would encourage more interaction between the different cultures living in the area?

- ☐ Festivals
- ☐ Farmer markets
- ☐ Concerts at local park
- ☐ Other: _____

Question #4 –What would you like to see done with vacant (or underutilized) lots along the West Washington Street? (Especially in the segment between S. Lyndhurst Dr. and Tibbs Ave.)

- ☐ Parks
- ☐ Plazas / Squares
- ☐ Community Gardens
- ☐ Other:

Question #5 –What is the greatest environmental concern for the West Washington neighborhood?

Question #6— What are the present concerns with West Washington Street in regards to its economic role for the city?

Question #7 –What do you believe the residents of neighborhood would benefit the most with the development of the corridor?

Question # 8 – What is the street's primary function today?

- ☐ Transportation Street
- ☐ Cultural Street
- ☐ Commercial / Shopping Corridor
- ☐ Other: _____

Questions #9 – How pedestrian friendly the neighborhood is currently?

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #10 –Residents easily walk to recreational areas in the neighborhood.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #11 – Roads and paths (sidewalks) through the neighborhood allow people to reach destinations such as parks, gardens, libraries, grocery stores, etc.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #12 – People can use a variety of transportation options, such as bus, walking, or biking, to reach places.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #13 – Transit stops are conveniently located next to destinations such as libraries, post offices, shops, and parks.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #14 – If sidewalks were more prevalent in the area, people would use them to reach neighborhood destinations.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #15 – If sidewalks were more prevalent in the area, people would use them and the health of neighborhood residents would improve.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #16 – If bike lanes were more prevalent in the area, people would use them to reach neighborhood destinations.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #17 – If bike lanes were more prevalent in the area, people would use them and the health of neighborhood residents would improve.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #18 – If bike lanes were more prevalent in the area, people would use them and be more likely to meet new people.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #19 – Pedestrian infrastructure like sidewalks and bike lanes are important (or would be used) by those who share my cultural background.

	1	2	3	4	5	
Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree

Questions #20 – Pedestrian infrastructure like sidewalks and bike lanes are important (or would be used) by those who are culturally different than me.

Questions #21 – How would West Washington Street be described? (Especially in the segment between S. Lyndhurst Dr. and Tibbs Ave.)

Question#22 – Do you think the physical environment of West Washington St. reflects the neighborhood culture and identity? Why?

Question#23 – How can the culture and identity of the West Washington's neighborhood be reflected along the corridor?

APPENDIX C: SITE ASSESSMENT QUESTIONNAIRE

SITE ASSESSMENT AND OPPORTUNITIES FOR SITE SUSTAINABILITY

1. Name of open space (park, community garden, or plazas) being reviewed within and near the neighborhoods. If name is unknown, list the main cross streets. _____

2. Below are a series of statements about the conditions of the park being reviewed. Please indicate your level of agreement with each statement.

	Strongly Disagree	Somewhat Agree	Strongly Agree
Restrooms are present, clean, and well maintained.	☐	☐	☐
Trees are healthy and properly pruned.	☐	☐	☐
Playground is clean and in safe working order.	☐	☐	☐
Parks and open spaces are in good condition.	☐	☐	☐
Park is free of litter.	☐	☐	☐
Playing fields are in good condition.	☐	☐	☐
Sports courts are in good condition. (Basketball, soccer, tennis, etc.)	☐	☐	☐
Drinking water fountains are present and work properly.	☐	☐	☐
The space has enough lighting	☐	☐	☐
Seats around the park are conveniently located.	☐	☐	☐
Park has enough places to sit.	☐	☐	☐
People have a choice of places to sit, either in the sun or shade.	☐	☐	☐
Sitting areas are provided and in good condition.	☐	☐	☐

3. If you have any other comments about the park, additional space has been provided on the last page of this survey. Thank you for participating!

APPENDIX D: MAPS AND PHOTOGRAPHS

FIGURE 8.0 - LARGE PARKING SURFACE AREAS ADJACENT TO MAIN STREET

FIGURE 8.2 - UNDERUSED SURFACE AREAS

FIGURE 8.1 - WEST WASHINGTON STREET LOOKING EAST TOWARDS DOWNTOWN

FIGURE 8.2 - NO SENSE OF IDENTITY

FIGURE 8.2 - NO RELATIONSHIP BETWEEN BUILDINGS AND STREET

FIGURE 8.3 - NO SEPARATION BETWEEN BUILDINGS AND STREET

FIGURE 8.4 - LOCAL NEWSPAPER BUILDING

FIGURE 8.5 - CLOTHING STORE

FIGURE 8.6 - LOCAL BEAUTY SALON

FIGURE 8.7 - AUTOMOBILE DEALERSHIPS FILL THE MAJORITY OF SPACES ALONG THE STREET.

FIGURE 8.8 - RUNOFF RAINWATER FROM AUTOMOBILE DEALERSHIP JEOPARDIZES NEIGHBORHOOD WATER QUALITY.

FIGURE 8.9 - MOST BUS STOPS LACK SHELTERS OR SITTING BENCHES FOR PEDESTRIANS

FIGURE 8.10 - PARTS & OPEN SPACES ARE POORLY MAINTAINED.

FIGURE 9.2 - EXISTING PARKS ARE UNDERUTILIZED AND OVERGROWN

FIGURE 9.0 - PARKS OFFER FEW SHELTERS.

FIGURE 9.3 - UNDERUSED PARK AREA

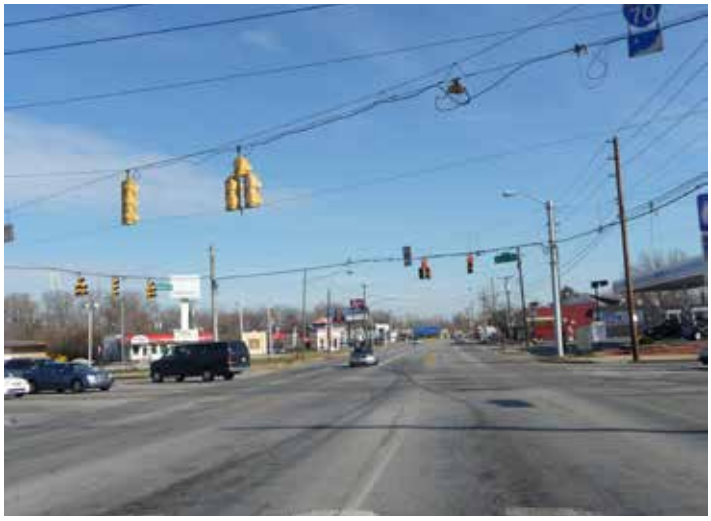


FIGURE 9.1 - INTERSECTIONS REPRESENT A MAJOR OBSTACLEFOR PEDESTRIANS.

FIGURE 9.4 - SOME NEIGHBORHOOD STREETS ARE NOT AESTHETICALLY PLEASING.

FIGURE 11.8 - CONNECTIVITY

FIGURE 11.9 - ENVIRONMENTAL QUALITY

FIGURE 11.10 - LAND USE/INFO

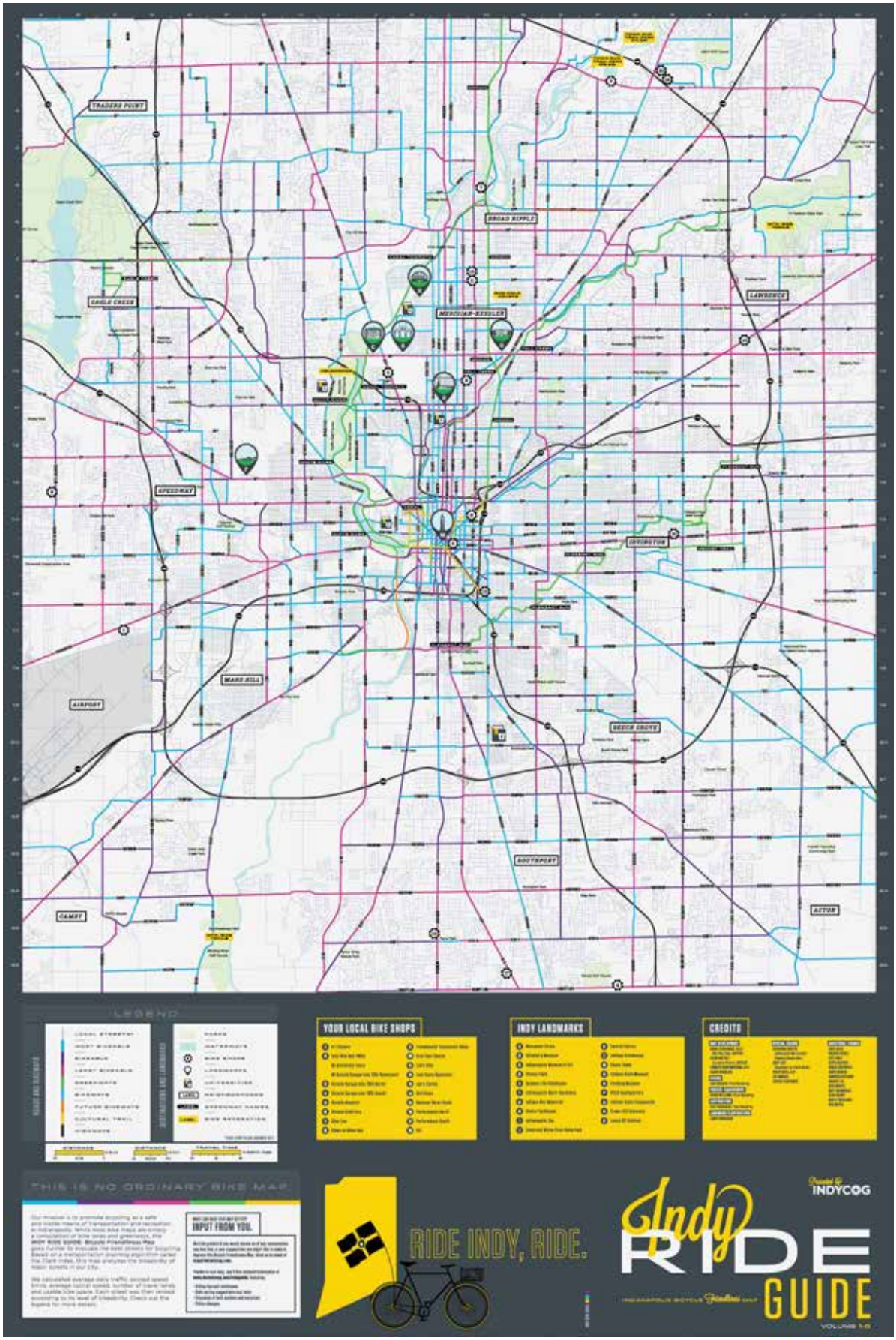


FIGURE 12.0 - MAP SHOWING THE LOCATION OF EXISTING BIKE LANES AND THE BEST STREETS FOR BICYCLING IN THE CITY.

APPENDIX E: STUDY MODELS OF SITE

FIGURE 9.5 - STUDY MODEL #1

FIGURE 9.8 - STUDY MODEL #1

FIGURE 9.6 - STUDY MODEL #1

FIGURE 9.10 - STUDY MODEL #1

FIGURE 9.7 - STUDY MODEL #1

FIGURE 10.0 - STUDY MODEL #1

FIGURE 11.1 - STUDY MODEL #2

FIGURE 11.4 - STUDY MODEL #2

FIGURE 11.2 - TYPICAL COMMUTER
TYPE III PLAN

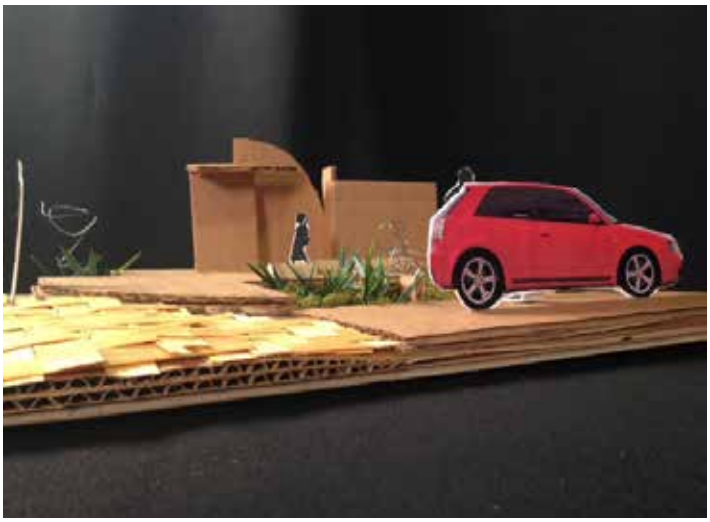


FIGURE 11.5 - TYPICAL COMUTER
TYPE III PLAN

FIGURE 11.3 - STUDY MODEL #2

FIGURE 11.6 - STUDY MODEL #2

APPENDIX F: ZONING MAP

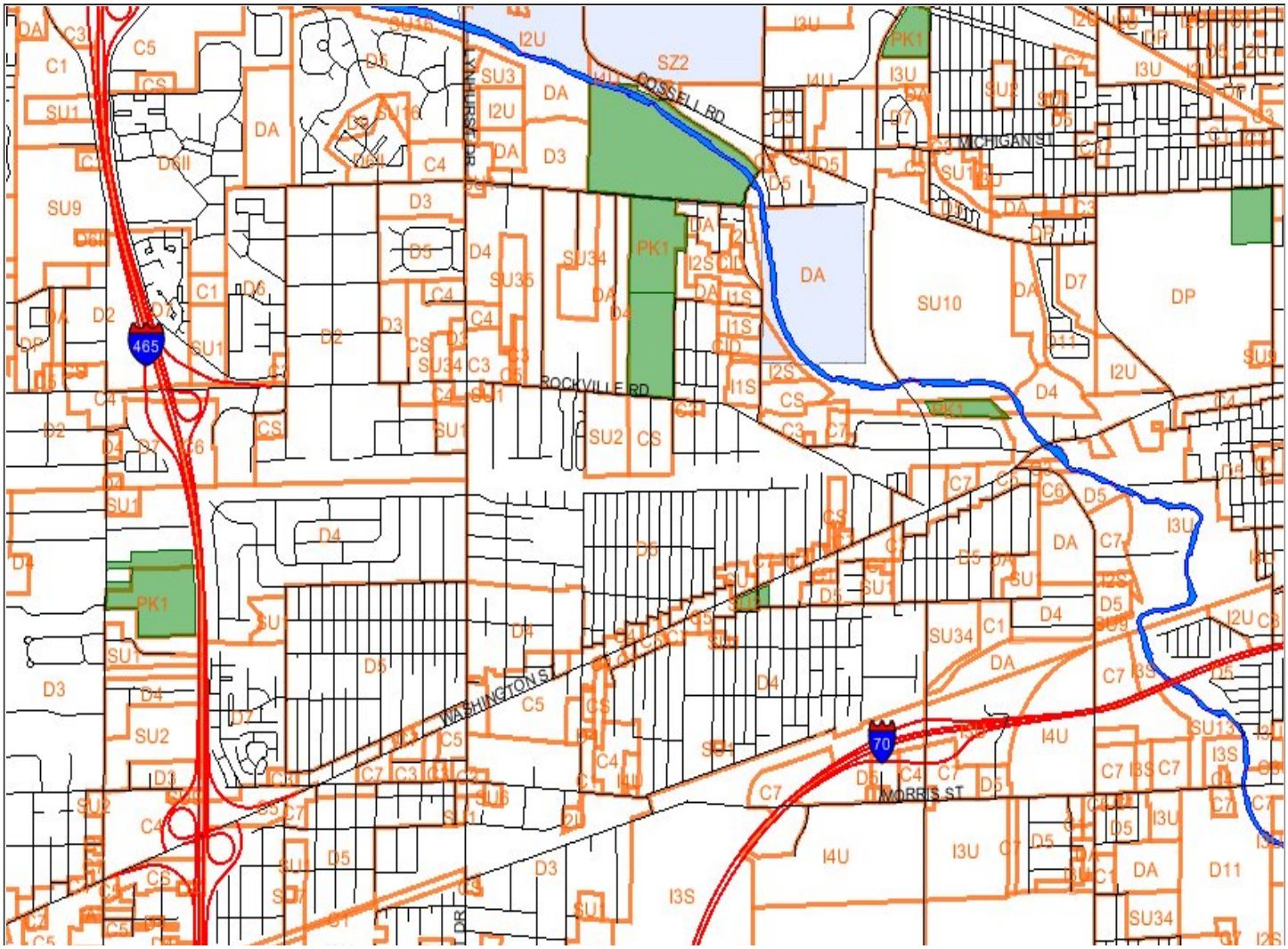
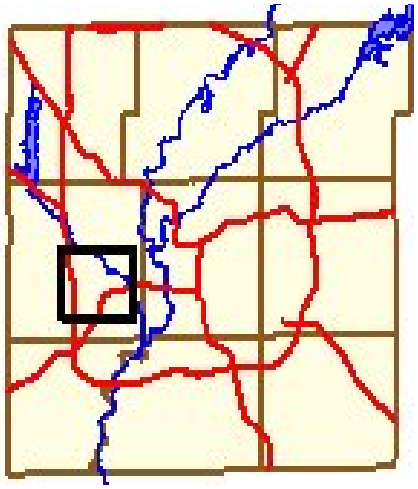


FIGURE 11.7 - ZONING CONDITIONS FOR PROJECT SITE.



Application Source: http://gispv01.indygov.org/prod/GeneralViewer/

This map does not represent a legal document, It is intended to serve as an aid in graphic representation only. Information shown on this map is not warranted for accuracy or merchantability.

APPENDIX G: EXISTING & PROPOSED DEVELOPMENT NEIGHBORHOOD PLANS

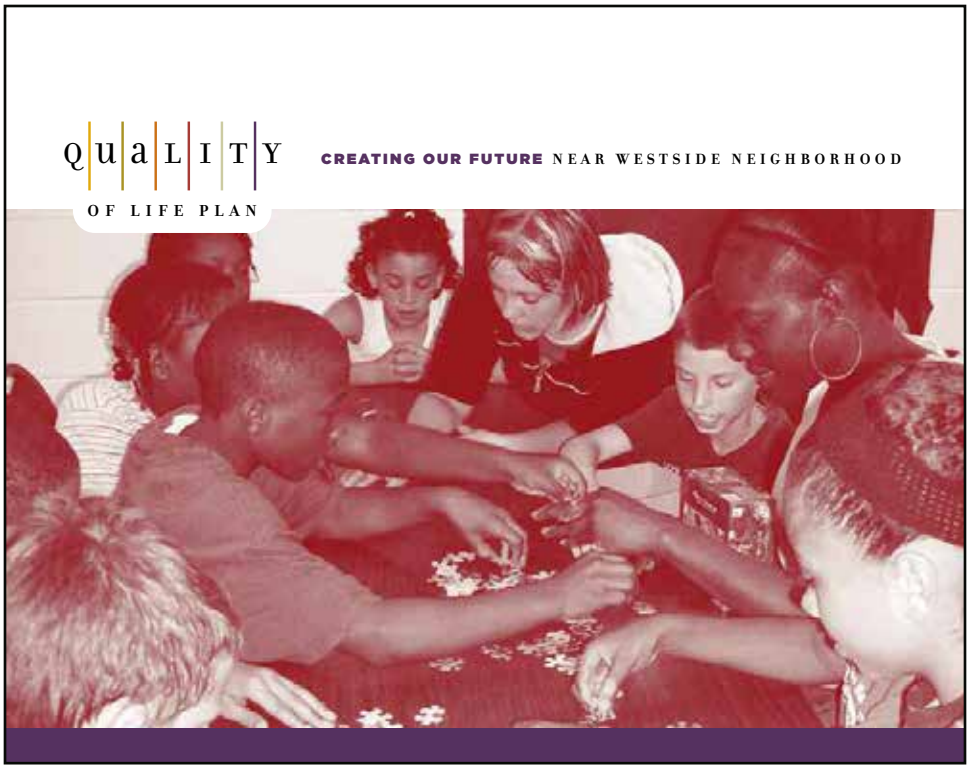


FIGURE 12.1 - 2012 WEST WASHINGTON NEIGHBORHOOD QUALITY OF LIFE PLAN

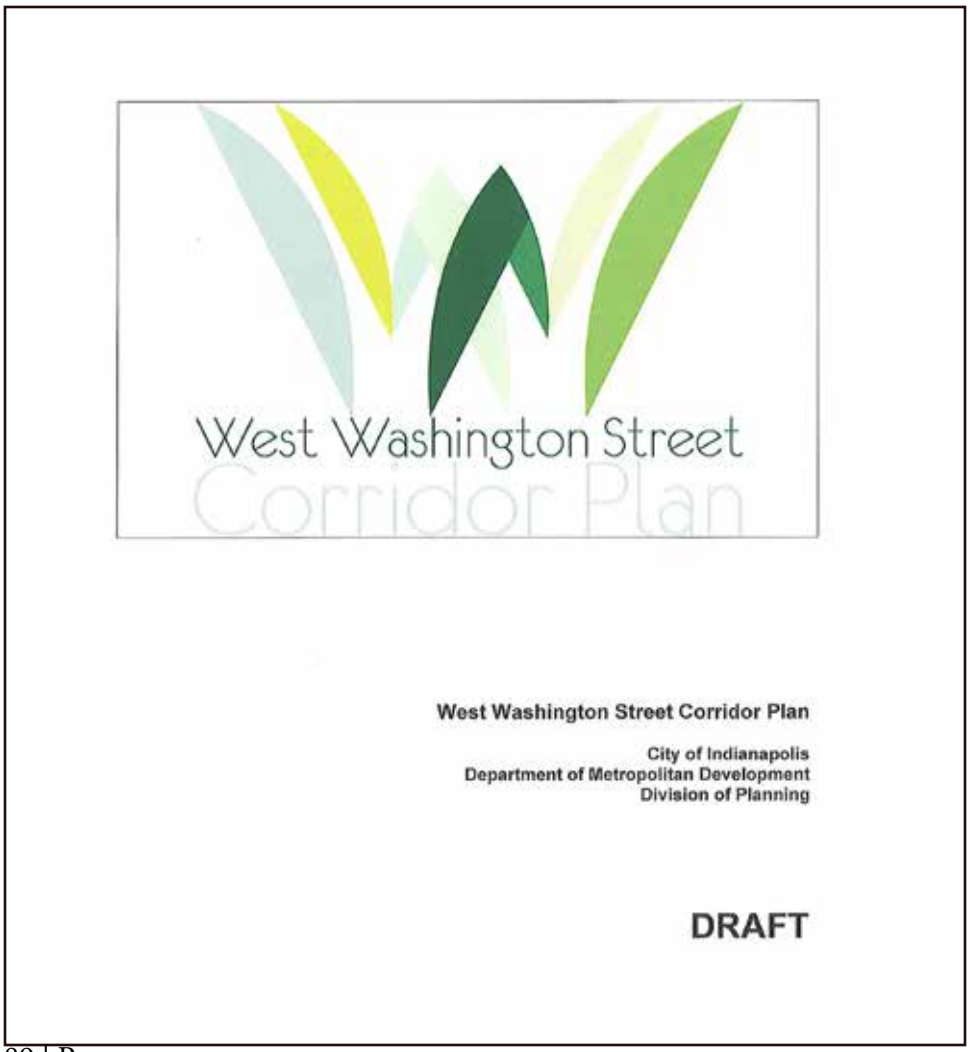


FIGURE 12.2 - 2012 WEST WASHINGTON STREET CORRIDOR PLAN (DRAFT)

APPENDIX H: TRANSPORTATION SYSTEMS INITIATIVES

Indianapolis Metropolitan Planning Area
2035 Long-Range Transportation Plan –
Volume 1

INDY CONNECT
CENTRAL INDIANA'S
TRANSPORTATION INITIATIVE

prepared for
Indianapolis Metropolitan Planning Organization
prepared by
Cambridge Systematics, Inc.
with
HNTB

Approved by:

Indianapolis Regional Transportation Council, February 16, 2011
Madison County Council of Governments, March 25, 2011

FIGURE 12.3(UP) , FIGURE 12.4 (DOWN-LEFT) - PROPOSED & EXISTING TRANSPORTATION SERVICES

APPENDIX I: TIMELINE

a. Week 1 – Week 5

	Week 1	Week 2	Week 3	Week 4	Week 5
	Dec. 16-22	Dec. 23-29	Dec. 30-Jan.5	Jan.6-12	Jan.13-19
Meet with Advisor					
Site Visit					
Conduct Interview/assesments/surveys					
Obtain Base Drawings / Photos					
Continue Research					
Inventory/Analysis					
Progress Presentation					
Develop Concepts					
Master Plan					
Sections /Perspective / Axon					
Sketch Up Model					
Complementary Drawings					
Set Up Proposal Doc.					
Set Up Pre-Display Boards					
Second Progress Presentation					
Booklet Edits/ send to print					
Display Board (design board)					
Prepare for Presentation					

b. Week 2- Week 10

	Week 6	Week 7	Week 8	Week 9	Week 10
	Jan.20-26	Jan.27-Feb.2	Feb.3-9	Feb.10-16	Feb.17-23
Meet with Advisor					
Site Visit					
Conduct Interview/assesments/surveys					
Obtain Base Drawings / Photos					
Continue Research					
Inventory/Analysis					
Progress Presentation					
Develop Concepts					
Master Plan					
Sections /Perspective / Axon					
Sketch Up Model					
Complementary Drawings					
Set Up Proposal Doc.					
Set Up Pre-Display Boards					
Second Progress Presentation					
Booklet Edits/ send to print					
Display Board (design board)					
Prepare for Presentation					

a. Week 11 – Week 15

	Week 11	Week 12	Week 13	Week 14	Week 15
	Feb.24-Mar.	Mar.3-Mar.9	Mar.10-16	Mar.17-23	Mar.24-30
Meet with Advisor		Spring Break			
Site Visit					
Conduct Interview/assesments/surveys					
Obtain Base Drawings / Photos					
Continue Research					
Inventory/Analysis					
Progress Presentation					
Develop Concepts					
Master Plan					
Sections /Perspective / Axon					
Sketch Up Model		Spring Break			
Complementary Drawings					
Set Up Proposal Doc.					
Set Up Pre-Display Boards					
Second Progress Presentation					
Booklet Edits/ send to print					
Display Board (design board)					

THE END... CELEBRATION

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